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ABSTRACT

Preceding the Sixth Annual Meeting of the Inter-American Center for Research and Documentation on Vocational Training (CINTERFOR), a 3-day seminar to study manpower development and training was conducted. The seminar was planned and coordinated by a committee with representatives from the U.S. Department of Labor, The Agency for International Development, and the Dunwoody Industrial Institute. The specific objectives were to examine the role and contribution of organized labor in training development, role of private industry in manpower training, the need for effective communication between government and the private sector on all matters related to manpower requirements and training development, the nation's patterns of education and training, and the factors influencing the trends of manpower development. Seminar proceedings pertinent to these objectives comprise the body of the report. (BC)

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U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

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CINTERFOR

INTER-AMERICAN SEMINAR ON MANPOWER TRAINING AND DEVELOPMENT

September 9 - 11, 1968 Cleveland, Ohio

INTERNATIONAL MANPOWER INSTITUTE

VT010240

Conducted by: THE INTERNATIONAL MANPOWER INSTITUTE
Under sponsorship of: Agency for International Development and U.S. Department of Labor

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CINTERFOR
INTER-AMERICAN SEMINAR ON MANPOWER TRAINING AND DEVELOPMENT

September 9-11, 1968

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"CINTERFOR - Project No. 053"

Conducted by:
THE INTERNATIONAL MANPOWER INSTITUTE

Under sponsorship of
Agency for International Development
U. S. Department of Labor

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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INTRODUCTION

The Inter-American Center for Research and Documentation on Vocational Training (CINTERFOR) was created by the International Labor Office in 1962 at the suggestion of the American States, and established in Montevideo with the financial contribution of Uruguay in 1964.

The CINTERFOR organization is primarily concerned with the promotion and coordination of research and related activities which will lead to the improvement of manpower training and development in the American hemisphere. It also serves as a clearinghouse and dissemination agency for all types of information, publications, etc. in the field of vocational education and training.

CINTERFOR is governed by a Technical Committee, made up of representatives of the member countries and acting as a liaison body between the Director General of ILO and the national organizations for vocational training.

Prior to 1967 the Technical Committee had met five times, once each in Brazil, Uruguay, Argentina, Chile and Venezuela. At the 1967 meeting the United States delegation invited the group to hold the 1968 meeting in the United States.

Following the acceptance by the CINTERFOR authorities of the United States invitation to play host to the sixth annual meeting of the organization's Technical Committee, the proposal was made, and the responsible U.S. Government officials agreed, to conduct a three-day seminar on manpower training and development immediately preceding, and in conjunction with, the annual meeting. The CINTERFOR authorities concurred with the plan and offered their complete cooperation in its execution. This report is limited to the three-day seminar. It does not include the proceedings of the business meeting which the delegates to the CINTERFOR Conference conducted on the final two days.

A committee, representing the United States agencies most directly interested in international manpower training and development, was constituted to guide the planning and coordination of the seminar. The committee decided that an analytical examination and presentation of the United States education and training patterns and systems would be the most appropriate theme for the seminar, and the following objectives were formulated:

The broad objective was to identify and delineate the more important patterns for education and training of manpower in the United States, to examine the factors and forces which have had significant influence on the development of these patterns and to present an overview of the operation of training systems as they now exist and the interrelationships between the various elements of the systems.

The more specific objectives of the seminar were to illustrate:

1. The role and contribution of organized labor in training development.

2. The role of private industry in manpower training.

3. The vital need for continuous effective communication and articulation between government agencies and the private sector on all maters related to manpower requirements and training development.

4. That a nation's patterns of education and training are continuously evolving and that the factors influencing the trends of manpower development should be identified and continuously evaluated.

The International Manpower Institute of the U.S. Department of Labor was selected as the operational agency to do the detailed planning for and to conduct the seminar. The Agency for International Development agreed to finance the basic cost of the seminar through an interagency (PASA) agreement.

Several possible sites for the seminar and Technical Committee Meeting were considered by the planning group, and Cleveland, Ohio, was finally selected because it seemed to offer the best combination of favorable factors. Among these were: Its relatively central location and good transportation facilities; the diversity of industrial and commercial enterprises operating there; the variety and quality of manpower education and training institutions and programs operating there and, most important, our very cordial reception by local government, management and labor organizations in the community.

In planning the program for the seminar, every effort was made to obtain representation from a broad spectrum of the many and diverse agencies and organizations that are interested and active in the United States manpower education and training systems. Maximum consideration was also given to the questions and suggestions of the delegates from the member countries as relayed to the planning groups by CINTERFOR. The somewhat heavy emphasis on industrial training in the seminar program does not in any way indicate that training in the seminar program does not in any way indicate that training for agriculture, commercial, service and related occupations is not equally important and perhaps more important in developing countries.

Perhaps the most difficult problem encountered by the planning group was the selection from the vast array of persons, agencies, organizations and enterprises available, those which could be most meaningfully explored by the participants in the brief span of three days. It also endeavored to make allowance for maximum participation by the delegates to the seminar.

Simultaneous translation from English to Spanish and from Spanish to English (when appropriate) was used to provide the best communication possible and allow a meaningful dialogue between the speakers and the participating delegates.

This report of the seminar proceedings was prepared with the view of preserving the dialogue to the maximum extent possible for the mutual benefit of the sponsors and delegates.

The transcript of all of the seminar proceedings pertinent to the theme and objectives comprises the body of the report. The program outline and a list of the names and addresses of the official delegates and observers are annexed for reference purposes.

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ACKNOWLEDGEMENTS

The success of this seminar is primarily due to the excellent presentations made by all of the speakers participating in it. Special appreciation is extended to them and to their respective companies, organizations and agencies who graciously allowed them time off from their regular duties to take part in the program.

The cordial manner in which the government, management and labor organizations of the Cleveland community played host to the seminar not only made an important contribution to it, but more important, to furthering good interamerican relations. In addition to those who participated directly in the program, thanks are due to Mr. Fred Lynch, Senior Vice President of the Central National Bank of Cleveland; to Mr. A. Clifford Thornton, Vice President of Eaton, Yale and Towne, Inc.; to Mr. Charles W. Ufford, Vice President of Warner-Swasey Company; to Dr. Abe Silverstein, of the Lewis Research Center; and to Mr. David G. Hill, representative of the office of Mayor Carl B. Stokes.

The outstanding work of Mr. William Webb, Director, Mr. Kenneth Banks, Industrial Training Advisor, and the staff of the area office of Apprenticeship and Training in Cleveland in making local arrangements for the seminar should be given special recognition.

Thanks are extended to the companies of the "Aristotle" organization for their very worthwhile exhibit of new instructional materials and equipment for manpower training.

Appreciation and gratitude are offered to the members of the planning committee and to the many other persons who assisted in the planning and operation of the seminar.

CONTENTS

INTRODUCTION i
SEMINAR PLANNING COMMITTEE iii
ACKNOWLEDGEMENT v

Monday, September 9, 1968

OPENING REMARKS 1
Edgar C. McVoy

KEYNOTE ADDRESS 1
Eli Ginzberg

EDUCATION AND TRAINING PATTERNS FOR MANPOWER IN THE UNITED STATES 5
Chairman: Robert E. Culbertson
Panelists: Joshua Levine
Frank Keegan
James Yasinow

FACTORS INFLUENCING TRAINING PATTERNS IN THE UNITED STATES 19
Chairman: John P. Walsh
Panelists: Robert M. Reese
Peter Stoicoiu
Clarence L. Eldridge

Tuesday, September 10, 1968

HOW OUR TRAINING SYSTEMS WORK 39
Chairman: Karl R. Kunze
Panelists: John A. Beaumont
Joseph Taylor
Morris A. Horowitz

Wednesday, September 11, 1968

GREETINGS FROM THE MAYOR OF CLEVELAND 59
David G. Hill

INVOLVEMENT OF GOVERNMENT AND NONGOVERNMENT ORGANIZATIONS IN THE DEVELOPMENT OF MANPOWER AND TRAINING IN THE UNITED STATES 61
Chairman: William Mirengoff
Panelists: Martin H. Bowerman
Lowell Burkett
Ray Lesniok
Robert Wilson

CLOSING CEREMONY 81
Speakers: Eduardo R. de Carvalho
Darwin M. Bell
Fernando Romero
A. Clifford Thornton

MORNING SESSION

September 9, 1968

MR. McVOY: Good morning.

The Seminar of the Interamerican Center for Research and Documentation in Vocational Training is now open.

I am Edgar McVoy, Director of the International Manpower Institute, which has been in charge of the planning and administration of this seminar.

I am greatly honored to welcome you distinguished visitors from the American republics to the United States for this seminar.

We are also pleased to have with us representatives of several international agencies, from the U.S. Government, from academic circles, private industry, labor and from Cleveland.

This seminar is sponsored by our Government, jointly by the Department of State, the Agency for International Development, and the Department of Labor.

When we put together the program for this seminar, our major purpose was to give you a picture of the current patterns of industrial training in the United States and to try to tell you how we got where we are and where we think we are going.

We have put together a program which I hope will serve that purpose.

We will try to give you perspectives on these training programs from Federal and local government, schools, industry and labor; as you note from the program, all these elements are represented by speakers and panelists. We hope we have allotted enough time for your questions and comments. The chairmen of the panels have been urged to protect the discussion period, even if it means cutting off a speaker in the midst of a very eloquent passage.

Virtually all the people on the program, as well as those assisting with local arrangements, and the exhibitors, have come here on their own time, with expenses paid by themselves or their organizations. Perhaps this may help to illustrate one of the factors in making the American—the United States I should say—manpower and training systems work. Many people from different interest in our country contribute to our society. Somehow it develops a degree of coherence and we hope that this seminar also will have some degree of coherence.

I will now present the people who are on the platform.

Mr. Bergerie, from the ILO.

Mr. Carvalho, whom you know, of course, from CINTERFOR, the Director of CINTERFOR.

Mr. Culbertson, from the Agency for International Development.

Mr. Ginzberg, who will be your Keynote Speaker.

This leads me to the introduction of our Keynote Speaker.

He's well known, both in national and international circles, one of the real pioneers in this whole field of manpower training and conservation of human resources.

Among his many honors and achievements, he is Chairman of the National Advisory Committee on Manpower for the President, Professor at Columbia University, Director of the Conservation of Human Resources Program there.

Dr. Ginzberg.

DR. GINZBERG: Mr. chairman, delegates, ladies and gentlemen. I have been involved this summer, and I am still involved in a retraining program at Columbia University.

We had a revolution at Columbia in April, 1968, and since that time, the faculty has had to learn many new things, the trustees have had to learn many new things, and the students have had to learn many new things.

My remarks will deal not only with training but also with retraining.

I travel frequently, but I regret that a major trip to Latin America is still in front of me.

I did, however, spend some weeks in 1964 in Venezuela on a human resources mission that gave me at least a first introduction to your problems.

Columbia University has a large number of Latin American students and they have given me a second insight into some of your problems.

Mr. McVoy said this program would focus on the institutions that are involved in training in the United States, and emphasize how they contribute to the advancement of the American economy and society.

I will try to give you a more balanced picture, one that will avoid over-selling our training system. I will tell you both about its strength and its weaknesses.

I plan to do three things: First, to put before you some general observations about the relationship between training and the economy from an American perspective.

Secondly, I want to highlight for you some of the principal institutional structures in the United States.

Finally, I will call your attention to a few lessons that we have learned that might be helpful to you.

The first observation is that the greater the capital investment in the economy, the larger the role that training should play.

Sound economic development requires one to balance capital investment and human investment.

Some years ago I made a presentation to the Cabinet of the United States during which I pointed out that our aid program was out of balance. It seemed to me that we were providing too much money for capital investment and not enough to encourage the recipient countries to build up their manpower resources to match their new technology.

The second point is that the large the scale of business, the greater the opportunity for specialization, and the greater the need for training.

There is no point in buying expensive machinery for a work force that does not know how to operate and maintain it.

This last year I visited East Europe--Yugoslavia, Bulgaria, Romania, Hungary, and Czechoslovakia.

In all of the factories that I visited, I saw good equipment badly utilized because the work force was poorly trained to cope adequately with the new machinery and processes. Machinery alone cannot do much.

The third point is that skill represents a differential competence. It is something that some people have but not others. Therefore, the question of skill always has to be analyzed from the viewpoint of the underlying competence which is generic to a population. One cannot focus on training alone but must relate it to the educational competence of those who are to be trained.

The educational underpinnings establish the generalized competence of each generation. Skills are acquired only by a minority that secures training and experience beyond the basic minimum available to all.

Training, however, is not a one-time undertaking. It is not something that occurs at one point in a man's life. It has to be viewed as an ongoing process.

People can be trained only if they want to be trained. There is no way of forcing training on people.

They cannot be trained unless they have access to training, and they will be willing to undergo training only if they assess that it will be worthwhile for them to do so.

Finally, since a good training operation requires costly resources, it is important both from a planning and operational point of view to see that the training structure is in step with the economy. It would be foolish to construct a structure that was unduly elaborate and costly.

The next point to note is that since a great many people require training, it cannot be the singular responsibility of any one organ of society to provide all of the training that is required.

Even an economy at an early stage of industrialization such as in Eastern Europe is too complicated for any single agency to carry out the total training job. It is generally desirable to have many different institutions contribute to training.

Against the background of these general observations, I will now focus on some of the special aspects of training in the United States.

The first, and from many points of view the most interesting facet of American life, is that a man is evaluated not by the work he does but by the money he earns.

I have said many times that if there is one product the United States should export to the whole world it is determining a man's status not by the work he does but by the value of his output.

The fact that we are a people deeply committed to material progress has given our culture a tremendous vocational orientation.

We have always had a practical, vocational, purposeful orientation towards life.

Because of our value structure, education has long had a heavy economic accent. In turn, our citizens have been willing to put relatively large amounts of money into education. They did not see education as a luxury, but rather as being linked very closely to economic prosperity.

The third important point is that we had a revolution in womanpower in the United States much earlier than most other countries. Women have long had access to education and training and one-third of the American labor force today is composed of women. Another very interesting fact is that half of the women aged 45 to 55 years are currently in paid employment. If one places a heavy weight on a prosperous economy, one must be concerned with women as well as with men.

Women have a particularly significant role to play in the service sectors of the economy, which can make ready use of their interest, skills and time. And the American economy is growing most rapidly in the service sectors.

We have always had a multiplicity of training institutions inside of our educational system, alongside it, outside it, in industry, and even outside of industry. We have developed a great variety of patterns in seeking to utilize effectively these different training facilities.

But much training goes on outside of formal training institutions. We have a mobile working population. Many workers change jobs and locations frequently. Such mobility allows many men to pick up skills through experience on the job. A man having learned something on job A, goes on to job B. He learns something additional on job B, and then he applies for and gets job C, having convinced his new employer that he is qualified. In a tight labor market which has often characterized the United States much skill acquisition results from this this type of job mobility.

Many workers who add to their skills in this manner supplement what they learn on the job through attending evening schools or taking correspondence courses. The interest of American workers in improving their skill stems largely from their appreciation of the close linkages between more skill and higher wages.

Given our type of trade union structure, predicated on bargaining with specific employers with a focus on seniority rights, workers place heavy stress on their right to bid for better jobs and to be selected for training for such jobs. The structure of union activities has contributed to increasing the concern of American workers with opportunities for additional training.

The trade unions likewise have made a major contribution to the training structure in selected areas of the American economy through their participation in apprenticeship programs. They have cooperated with employers in a successful attempt to keep the Government from dominating such training.

Some of the larger construction unions invest several million dollars of their own funds every year to retrain their journeymen so that they can better cope with the new technology. Trade unions play an important part in our total training structure.

Similarly, American industry has long had a preference for hiring young people with general knowledge who have a willingness and capacity to learn and providing them with the specialized training to fit its specific requirements.

One could never develop a formal training system that met the specific needs of American industry; hence its willingness to assume responsibility for providing specific training. Among the reasons why it preferred this path is that it could establish its own standards of performance.

There has long been a sizeable private effort in vocational education and training. Private schools differ widely in quality from excellent to poor; some institutions are more interested in extracting money from students than in performing a training service. But people will, in general, not continue to put out money for training unless they feel that they can get something worthwhile in return. The scale of the private training establishment in the United States is truly impressive.

Another dimension worth calling attention to is the fact that since 1940 we have had almost 30 million young men spend some time in the armed services. That means that about half of the current male work force has had military experience. An advanced technological military establishment like ours has requirements for skills not very different in many regards from that of the private sector. Hence, the armed services have been a significant contributor, if only indirectly, to raising the skill level of the United States. It is inconceivable that our airplane industry and our electronics industry could have grown at the rate they have, had it not been for the substantial contribution of the armed services to enlarging the skill pool.

Starting in 1961, but first reaching a significant level in 1965, the Federal Government has become committed to financing vocational training. While it first became involved in World War I in providing modest aid to vocational education–one could go back to the Civil War to the Morrill Act and note its aid to our state university system–its intensified efforts are of recent date. The Federal Government is spending this year between one-half billion and one billion dollars for training the hard-to-employ. In addition, it is spending several hundred millions of dollars for vocational education. Hence, even conservatively estimated, its combined commitment is over a billion dollars annually.

Another interesting aspect of the American scene is the many informal ways people secure training in the

United States. We alluded earlier to correspondence courses and to night courses. We have self-help manuals for those workers who are able to study on their own. There are a great many other ways in which people can increase their skills.

An important point in this connection is our recent perception that we have not paid sufficient attention to the linkages between the different parts of our training system. Few employers know what local government is doing. Few local governments have put together in-school programs and out-of-school efforts. One of the most difficult problems in enhancing manpower effectiveness has been to develop a local structure in all of the major cities of the United States in which these disparate parts are properly linked to each other. But we have at least reached the point where we recognize that we have a problem.

This is how I appraise our current situation. A large part of our population has access to training, but there are many millions who want and need training and who do not have ready access to it. Despite our wealth we still fall seriously short of providing an adequate training structure, especially in smaller communities.

While we have some excellent training institutions within the educational system and within the industrial sector, there are many public and private institutions of limited worth.

As an economist looking at the American scene, it is important to think of training in relationship to job mobility and the wage structure. The best training system in the world which is not closely geared to incentives will fail; people will respond to training only if they recognize that it will benefit them.

We still have a long way to go in this country in improving the articulation among the several pieces of the training structure.

My concluding remarks, I hope, will have some relevance for the problems facing Latin America. The first and most important point is that in most cultures social status is geared to the work that a man does. This means that many workers are looked down upon, even though the jobs which they perform are very important for the economy.

This is true in most communist as well as most capitalistic countries. Perhaps only in the United States can dirty work be respectable. A worker is pleased to train for a job where he might be able to earn as much as $8,000, $10,000, or even $14,000, as a plumber, an electrician, a construction worker, or a steel worker. Such jobs have little or no prestige in the rest of the world, but here in the United States workers are actively competing for them. And small wonder that they do. Even in the rich United States, $8,000 is approximately the median family income, so many good blue collar jobs pay above the median.

A major drag on accelerating economic development in many parts of the world is the lack of alignment between the value structure, the monetary structure and the work structure.

A second point relates to the importance of strong labor market and employment institutions. It makes little or no sense to train additional people if there are many with the required skills who are currently unemployed or underemployed who could fill the openings if they would relocate.

Thirdly, training must be closely related to the educational foundation. Even in an advanced industrial society, manufacturing employment will never account for more than 25 percent of the work force, which means that services will loom very large and the productivity of services will depend very heavily upon the general educational base.

Fourthly, and very important for Latin America, are agricultural skills. These must not be neglected. It is an error to think of skills as being solely industrial skills.

The most advanced sector in the American economy, the most productive sector is agriculture, not industry.

We have had such rapid economic growth largely because we have solved to such a high degree our agricultural problem. Unless one moves ahead steadily in raising the productivity of agriculture, which in turn means raising the skill levels of the farm population, one cannot really succeed with industrialization.

Fifthly, attention must be devoted to improving the role of women. They represent a major manpower resource. And unless they are educated and trained it is questionable whether a proper balance can be established on the demographic front without which economic progress will come to a halt.

Finally, I would try to persuade you to have a realistic approach to training.

While good training is important, good training must always be considered within the context of costs and returns. One must avoid putting too much into buildings or into a permanent staff. A training facility is not and should not be a university. Such funds as are available should be invested so as to yield optimal returns to the largest possible number of people in search of training.

Moreover, training should never be considered the responsibility of a single department of government, or government alone, but should involve employers, trade unions, nonprofit institutions as well as government agencies.

Care must also be taken not to accentuate the certificates that trainees earn. While it is correct and proper that some recognition be given to men and women who successfully complete a training course or program, it is important to remember that the market should reward a man not for the studying which he has done, but for the work he is capable of doing. Developing countries must, therefore, take care to avoid placing undue stress on certification.

It is the skills that people have, not the training institutions that exist, that will determine the wealth of a nation.

(Applause)

MR. McVOY: Thank you Dr. Ginzberg.

MR. McVOY: I mentioned earlier that this seminar is sponsored jointly by the Department of State, Agency for International Development and the Department of Labor.

It is now my particular pleasure to introduce the chairman of this panel, Mr. Robert E. Culbertson, Deputy Assistant Secretary of State for Social and Civic Development, Bureau of Latin American Affairs.

MR. CULBERTSON: Thank you, Mr. McVoy, Dr. Carvalho, Dr. Ginzberg, delegates and friends to this seminar.

As the first chairman of the first panel session, I want to extend my own special welcome to these representatives of the Hispanic States of Latin America.

I spent many years living there and my heart remains there.

For the past three years, I have worked in other parts of the world, but now I am back in the Americas and I am very pleased to be so.

I would like to comment on the keynote address of Dr. Ginzberg.

Dr. Ginzberg said at the outset and again at the end of his remarks that a basic principle in economics is that the greater the capital investment, the greater the need for education and training. He also made the comment that international lending institutions and other agencies concerned with providing capital to developing countries have tended to forget this basic principle in recent years.

What I want to say here this morning is that, representing the Department of State, the Bureau of Latin American Affairs, and the Agency for International Development, I want you to know that we are redressing this grievance. Our policies are changing. We are rededicating ourselves to a greater concern for, and a greater concentration in, the entire field of education, including technical education. We have come to this realization over a period of some time.

We agree with Dr. Ginzberg in being concerned with the problems of economic development. We have been trying to solve them. We and the economists of the various Latin American countries, if I may restrict myself to Latin America, have tried to solve problems of economic growth and development one by one. And we have learned that this is a very difficult way to achieve total solutions. As the minister of finance of one of the Latin American countries said, and this minister of finance is himself an economist, "We economists really cannot explain much more than 30 percent of what happens in the economy." So, the attempt to "retail" solutions to economic development problems is found to be difficult. In a sense, we might say that we, in addition to rededicating ourselves to education, are underlining once again a concept which first developed in Latin America.

At least the phrase came to me first in Latin America and it is a phrase that cannot adequately be translated into English.

I think that what we are talking about, whether we are economists or whether we are educators, or whether we are simply interested in development, we are talking about the Spanish concept of dealing with this, (Valorizacion del Hombre).

We must face up to the interrelated intricate complicated problem of continual involvement in the effort to increase agricultural production, to make farming more profitable for the farmer, and at the same time to provide jobs for migrants from the farm to the city. We need to expand demands in the cities and at the same time create markets in the countryside for the products of the city. In trying to apply it to a specific problem like Northeast Brazil and its surrounding areas or as in Lima, with its mountain hinterland, one realizes that some progress can be made by devoting major, unusual attention to education, at least to equip the migrants and the farmers and the workers in the cities with the means whereby they may help solve their own problems. They must amass a sufficiently higher level of skill and dexterity to accomplish what the economists cannot.

It is worth repeating that the wealth of a nation depends on the skill and the dexterity of its population.

The subject of our seminar session this morning is education and training patterns for manpower in the United States.

We have several purposes in mind: To consider why and how various education and training systems have emerged in the United States in response to the needs of the economy and the society; to analyze the general pattern and the institutional structure of the major program; to discover how these programs function as an integral part of the system that meets the needs of the economy and the society; to attempt to discover during the course of these several days why the system does not reach an important percentage of our working age population. This is a serious problem in our own country and we all know that in Latin America it is perhaps the core of the problem–how to extend the program so that it reaches more than a small percentage of the working-age population.

Do we have any solutions to this? We have not proved it in this country, yet, I believe. But we do have clues and let us inventory what is being done.

In talking about vocational education in the United States, including skill training and our programs and systems, I would like to reiterate a statement from the announcement about the CINTERFOR Seminar. "The United States patterns and systems of education and training for manpower are not presented as a model to be followed, but to illustrate diversity of factors and forces which have exerted an important influence on their development and operation. Such influence must be given careful consideration in the planning of systems and programs if they are to be effective."

Let me repeat again, U.S. patterns and systems are presented not as a model but to illustrate the diversity of factors and forces involved.

This morning we are going to look at the system in the United States from three points of view.

First, from a comparative viewpoint in relation to the other countries in the Americas; secondly, from the standpoint of America's educational institutions per se, particularly those in the field of higher education; and third, from the standpoint of industry.

We have three distinguished panelists who will be presenting the subject from these three different points of view:

First, we have Joshua Levine, Special Assistant to the Director of the United States Employment Service.

Secondly, we have Dr. Frank Keegan, Associate Dean of Faculties of Cleveland State University.

And the third distinguished member of our panel is Mr. James Yasinow, who is Training Director for the Cleveland Electric Illuminating Company.

Let me first introduce Mr. Joshua Levine, Special Assistant to the Director of the U.S. Employment Service, who will discuss with us, on a comparative basis, current manpower and training patterns in the United States, as they relate to training and manpower patterns in Central and South American countries.

Mr. Levine.

MR. LEVINE: In new recognition of the fact that no one could hope to cover in 10 or 15 minutes a comparative analysis of the respective training aspects of Latin America and the United States, I have decided to confine myself to three major thoughts.

The first has to do with the existence in Latin America of several great national manpower institutions. I think the United States has something to learn from their existence, their finances, and experience.

For Latin America, I think the great national manpower institutions which exist there need to adopt a much broader view of their own role in the society and economy of their countries.––a much broader role, based on the whole field of manpower, rather than the limited one of manpower training alone.

The third point, which is applicable to both the Latin American experience and the United States experience, is that those people in institutions involved in training, as distinct from education, ought to make a much stronger effort to stay out of the classroom, or to get out of the classroom and back into the factory, the office and the farm.

Returning to the first point–the Latin American experience that has value for the United States–the major manpower training institutions in virtually every one of the great Latin American nations have come into existence based on a payroll tax of one or two percent from which they can float their manpower training programs, pay their personnel, and operate a major national institution. I recall Dr. Ginzberg's remark that about one billion dollars has recently been devoted by the Federal Government in the United States to vocational education and training programs. Assuming that our annual payroll in the United States is in the neighborhood of 350 billion dollars, three and one-half billion could be obtained in the United States on the basis of a one percent payroll tax. That is the proportion of national income which is being devoted to this field in many of the Latin American nations.

My basic point is that the payroll tax in Latin America has been devoted to, what I regard, as a very positive contribution to the economy and the society, namely, training. Whereas, a comparable portion of the GNP in the United States has been devoted to an essentially social, rather than economic, need. Aside from the social security taxes, which both groups of nations share, the one great distinction in payroll tax is that in the United States the payroll tax is largely devoted to unemployment compensation. The National Employment Service is also operated from a part of this unemployment compensation tax. These are essentially, and my colleagues in the Employment Service and the unemployment system will forgive me, negative services. They are to take care of a social and economic problem which arises from the fact that the economy has not quite done its job. Contrast this with the effort in Latin America which is devoted to vocational training, which is in effect a positive or a preventive measure, a step to insure that this amount of money will be devoted to producing something useful to the economy, rather than correcting one of its errors. I do not want to stay in this vein too long, but I did think it would be useful to those people in the United States who are here to make this comparison of thought.

The second point is primarily for the Latin American manpower training institutions themselves. My experience with them has been that they look too narrowly on their role as manpower training institutions. Dr. Ginzberg touched on the fact that manpower has many, many aspects. You cannot train in a vacuum. You must consider the work incentive of the workers, his working conditions, his relations with the employer, with his fellow workers, and with his capacity to bargain for wages and working conditions. Unless these factors are taken into consideration, a great deal of training will be wasted. I think these great national manpower training institutions of Latin America must look somewhat outside the role of manpower training alone. You cannot ignore pay problems because they do effect the utility and training accomplished. You cannot ignore utilization of the workers whom you have trained. You must know something about their utilization–how they have been hired, transferred, promoted, how they are paid and whether their pay is based on an evaluation of their skills and productivity or simply on some ancient habit which has never been examined.

Every nation, I believe, needs a manpower agency of some kind. In the United States this role has been served primarily by the United States Employment Service, in part by the Bureau of Labor Statistics, another entity in the Government, but we have looked on the manpower roles in these particular aspects. I think that Latin America is better served by looking on its manpower problem first from the point of view of training. Ten, 25, and 50 years from now they will be happier that they have concentrated on the manpower training area rather than on an unemployment service as we did in the United States. This will be less true, however, if they continue to limit themselves solely to the role of training. These institutions must give another thought to the more complex aspects so closely related that they are inseparable from the training task.

The third point is about staying out of classrooms. I think this has been one of the great weaknesses of both the systems in the United States and those that I see growing in Latin America. It is much too easy to build training programs around a professor and a classroom. It is much more difficult to build them around the actual tasks to be performed in the factory, in the offices and on the farm. It is more difficult but also more necessary and more productive and more desirable to do the training in that way.

Some of the statements that I have made have been rather arbitrary, but in the interest of brevity I have made them directly so, and you will have the opportunity to attack them later on when we have questions.

Thank you.

(Applause.)

MR. CULBERTSON: Thank you very much, Mr. Levine.

Our next panel speaker is Dr. Frank Keegan, Associate Dean of Faculties, Cleveland State University. Dr. Keegan will talk to us about current patterns and trends in manpower education and training and their relationship to the vocational institutions in the United States.

Dr. Keegan.

DR. KEEGAN: I am sure you were as impressed as I by the comment of our keynote speaker about the retraining of professors at Columbia University. I thought perhaps he might have said "also re-educated," according to a dictum of education, namely that education is what remains when all that we have learned has been forgotten. The distinction between education and schooling was essential to Dr. Ginzberg's remarks, and I should like to say they are essential to mine. I am concerned here chiefly with formal schooling, or formal education as the kind of background essential in a population for the emergence of skills necessary for manpower training and retraining.

I trust the chairman will forgive me if I take some liberty with the topic assigned. Rather than deal directly with the trends in manpower training as they effect U.S. educational institutions, I should like to deal indirectly with the topic by considering some effects of technological change and development upon these institutions and their practices. This liberty is justified by the fact that technological development in the United States has had a sudden and profound effect upon educational institutions themselves and upon their capacity to plan and manage manpower training programs. It is by understanding the effects of the technological revolution upon education that we will be best able to view our educational institutions as centers for manpower training.

One of the most important and surprising documents of this decade is the Report of the National Commission on Technology, Automation and Economic

Progress, which appeared in 1964. The report was important because it made public widespread private knowledge about the effects of automation and the accelerated rate of technological change in advanced industrial societies. It was surprising because it argues in effect that the best practical education today is the most theoretical.

The effect of this report was not limited to the United States, because other nations saw the pattern of their future written into it.

For those who were used to the old opposition between general, liberal, humanistic education and specialized technological vocational education, it was shocking to hear that the best way the young could prepare themselves for an uncertain economic future was to study basic sciences and the liberal arts. For those who used to regard the entrepreneurial mind as indifferent to humanistic culture, it was surprising to hear that history and literature would provide–in the language of the report–a "solid foundation for the adaptability necessary in a dynamic society." And for those who regard all education as formal and as terminal, it was unsettling to note the Commission's emphasis on the "life-long learning process" and the values of education outside the classroom.

We shall go a long way in understanding the relation between manpower training trends in the U.S. and formal educational institutions, if we understand why a report entitled "Technology and the American Economy" spend so much time defending and encouraging general and theoretical education rather than vocational and specialized training.

What has happened in the past two decades is well-known to all of you. We have now defined manpower as brainpower. We have moved from hand skills to intellectual skills, from muscle power to intellectual power. And we have moved at an accelerated rate. The National Commission on Technology revealed that the time lag between discovery and commercial application had been drastically shortened in recent years at every step in the process.

What the National Commission did *not* describe was the effect this technological change would have upon the educational institutions of the United States. We are now in a better position to observe these effects than in 1964. I should like, therefore, to spend these few minutes describing some of the effects of technological changes upon educational policies and practices in the United States.

The first effect of accelerated technological change is to restore the notion of basic and general education for most citizens. One can see this in the recommendation of the National Commission that vocational education should begin after the high school. It can be seen in the works of sociologists like Daniel Bell of Columbia University, who argues that a new emphasis on the methods and grounds of a discipline must replace broad surveys of knowledge so that, in his words, "What one learns today is not useless a few years hence." What is being argued is that liberal or general education can prevent vocational retraining in the future, or–in other words–that the best practical education is the most theoretical.

Another effect is to question a widespread assumption about formal schooling–that it insures economic success for the nation by raising individual incomes. It is now clear that one can just as easily argue the other way–higher economic levels contribute to the growth of schooling. As a nation develops technologically in production and in the income levels represented by the gross national product (GNP), it is possible to conceive of the educational system as the partner, and the product, of increasing affluence and leisure. And I will note parenthetically that the radical university students of our generation in many countries are critical of formal education for precisely this reason. They regard it–especially at the level of higher education–as the servant of the ruling economic classes. The phenomenon may be observed in countries as diverse as France, Mexico, Japan and the United States.

This particular argument suggests that higher economic levels are not the direct result of "investment" in formal education. The rate of economic growth can be as easily accelerated by efficient technological units of production managed by fewer and fewer human beings as it can by the mere increase in the years of formal education for all.

A related effect of technological change is the questioning of the whole rationale of formal schooling. Americans are especially prone to worship education as an end in itself because the free, public educational system is a truly remarkable achievement for an immigrant people. Nonetheless, as I mentioned above, it is doubtful whether that system caused the industrial growth in the U.S. or the other way round. Moreover, it is doubtful whether U.S. education can remedy all the social and economic ills currently assigned to it. At various times in American history, formal education has been called upon to produce ministers, to graduate professors, process citizens, reduce poverty and riots, improve morals and lead mankind to happiness.

One important effect of technological change is to sort out what the schools are capable of doing and what they are not.

This questioning of formal education, or schooling, is a healthy inquiry. It is a contemporary version of that earlier criticism of the 1930's and 1940's that schooling is removed from life and unrelated to social and industrial needs. However, the present criticism has more urgency and is more widely understood and appreciated than the earlier one.

I should like to bring to your attention a recent critical point of view regarding formal schooling in developing countries, particularly in Latin America. This point of view dissents from the unanimous praise of schooling as a necessary investment for these countries. It argues that the extremely high dropout rate in these countries (it has been estimated, for example, that only one of a thousand Mexican students who enters the first year of school actually completes a university degree) produces beneficial effects of education only to a favored few. Moreover, those who drop out—the vast majority—are not able, as in an industrialized society, to reap the benefit of their limited skills because there are not appropriate employment opportunities for them. Has this partial education, therefore, been wasted?

The solution to the problem of the school dropout, in this opinion, is to ask industry to accept the important role now played by the school and train its own employees. Another proposal would be to limit formal schooling to several months a year, but spread this type of schooling over the first twenty or thirty years of a man's life. This suggestion is close indeed to the Danish Folk School.

In the few moments remaining, I should like to note some particular programs and practices in U.S. higher education, which are a direct or indirect result of the new trends in technological development.

1. College admissions offices are increasingly more open to accepting the student who has an irregular collegiate pattern, or a combination of work-study, prior to university work.

2. There is a growing willingness to accept social work experience as a substitute for formal classwork. Note Peace Corp experience in translating overseas work into graduate course credit.

3. There is a growing willingness to accept these results in place of classroom hours in college, especially for adults who have achieved knowledge in informal ways. Note General Learning Examination of the College Entrance Examination Board.

4. There is curricular revision more responsive to the basic knowledge required to survive sudden technological change.

5. There is curricular revision moving toward lifelong learning. We are not only educating for work, but also for leisure. In the words of Vycheslav Yelyutin, Russia's Minister for Higher Education, "We can't teach the student everything he needs, but we must teach him how to learn."

6. There is an increasing number of opportunities for adults to continue their education and more informal ways in which to do it. Note Harold Howe II on "credentialling myopia."

7. There is a constant growth of the community college in the United States, an institution remarkable for its adaptability to social and technological needs.

I have said that the effects of technological change upon our educational institutions have been sudden and profound. I believe we shall find in the future that the effects will also be enduring. The direction of manpower training will inevitably follow these new educational directions.

Thank you very much.

(Applause.)

MR. CULBERTSON: Thank you, Dr. Keegan. I think I see a bit of conflict building up between what we were saying in the beginning about the wealth of the nation being in the dexterity and skills of its people, a broad generalization which underscores the importance of all education, quantitatively as well as qualitatively, and what Dr. Keegan has just now said to us, questioning, in part, the rationale of mass schooling. I hope that during the three days we will find out who is right and what is what between these two extremes.

Our next panel speaker is Mr. James Yasinow, Training and Development Director of the Cleveland Electric Illuminating Company. Mr. Yasinow is going to talk to us regarding patterns of manpower training and development that are currently operational within and directly sponsored by industry in the United States.

Mr. Yasinow.

MR. YASINOW: Thank you very much. It is very difficult to discuss the patterns of manpower training and development in the United States. It is such a broad topic. What I have done is try to break this down into five sections, looking at our employees, people who work for us in business in five major areas. You could probably pick 15 major areas but I do not have that much time so I am only going to try about five.

One group that comes to us I like to call the knowledge worker. This is a white collar worker, the staff assistant, the office worker, either male or female. The characteristics of the knowledge worker are that he has brains. He has some formal education. He has, as Dr. Keegan mentioned, the capacity. He knows how to learn. He may have learned some specific things, but he has the capacity to learn more. In business, this is really what we are looking for. When a man comes to work for us he does not know our company's policies or practices, he does not know our company's equipment or how to work certain things, but we are looking for the man with the capacity to learn. We can take him and train him in our ways and on our machines. The knowledge worker coming to us presents a particular training problem which I will talk about later.

He is a little different from category number two, the blue collar worker, the person who does not have a tremendous amount of formal education and a fellow who will make a living with his hands rather than with his brains. The knowledge worker will make his living with his brains and blue collar worker in the more physical type of job.

The third category of workers is the "hard-core" worker or the disadvantaged person. There is a difference between a person who is "hard-core" and other workers. The person who is disadvantaged has a behavior pattern that is different. He has the motivation, wants to do well and wants to earn a living but has never been given the opportunity. This presents particular training problems to us and we have used various techniques here that I will discuss later.

Category number four is the first line supervisor, the foreman, the office supervisor, the man who has subordinates working for him. He is the first line of management and I tend to think of him as management's forgotten man. Management companies talk about what they can do for upper management, but I think that the most ignored man is the first line foreman, the supervisor.

And the fifth category is your upper level managers. These peoples' skills can become obsolete if they are not given the opportunity for training and development. You cannot ignore the people on top.

All of these five categories of people are affected by the technological change which Dr. Keegan spoke of and it is very rapid indeed, but how do we meet the challenge of training these categories of people?

One of my basic philosophies is that the things you learn best are the things that you discover yourself. I think that all of you educators will pardon me, but lectures are really going out of style. The retention of a lecture I will liken to a sand castle built at the edge of the ocean at low tide. A sand castle will stand up only until the next tide comes in. We have to use new techniques to help people learn better and to retain knowledge better. We use a number of different techniques to aid this retention. For the knowledge worker we encourage great participation, not just one-way communication, but two, three, or 17-way communication. Our programs in training are geared to getting the maximum participation. We will demonstrate, rather than give a lecture on impact of the computer. We might put our participants through a simulation exercise. Here is an actual problem facing us and here is what the computer can and cannot do.

There's some point where you have to put the machines into the hands of the workers. I like Mr. Levine's comment on keeping out of the classrooms if at all possible. I think that this has a lot of value and it is a very valid statement. If you can get people into the field, they learn better because they feel more natural in a situation which is not highly structured. A classroom is highly structured, so even in a classroom situation we break up the tables, do not have them sit in rows or in circles, but attempt to break up this formalized structure. For the knowledge worker, we do make use of outside sources such as the university. There are areas in which the university can certainly be of great help to industry. Universities are in the forefront of the educational process and we lean on them very heavily.

For the blue collar worker of category number two, one technique which has been quite valuable is a simple one that has proven its worth many times over. This is the concept of job instruction training, where the philosophy is basically to tell a man what his job is going to be, perform this job for him, show him and tell him while you are doing it what is going on. Then ask the fellow to do things for himself and have him explain it to you so you know that he knows. Push and coddle him so that you know these basic jobs are actually learned, then you follow up and make sure that there is continuing feedback. The objective of job instruction training is to make the blue collar worker as productive as possible, as soon as possible.

There are other techniques that we use. For example, recently we have gotten into the use of video tape on closed circuit television. We can buy a closed circuit television system, a video tape system for $1,000. Three years ago this kind of a system would have cost us about $10,000. With a camera, a video tape recorder and a single television screen, we have been able to take photographs and closeups of equipment and processes that you just could not bring into a classroom. We also can get the top expert in the field to demonstrate how things should be done. By showing these video tapes around the company, you have standardization of instruction. People can see the equipment that you have only been talking about and this comes in very handy when you are working with equipment you cannot move.

The advent of low-cost television is a great boon to training in industry and business today. People learn better with their eyes as well as their ears, if you can take advantage of this. One technique we used to evaluate this kind of training is to put questions at the end of a video tape so that the discussion leader or the supervisor who is leading the training can then find out if the people watching the video tape really learned anything. Our purpose is not to chastise anybody but to find out how effective this kind of training is. It has prove to be effective.

We are very fortunate here in Cleveland to have a very fine educational television station. Some of their programs featuring outstanding people are telecast into our plant. We have these television programs coming in during working hours, in some instances, and also in the evening. Many of our workers come to us and say they need additional training which they haven't been able to get, so we put on programs in the evening for our people.

The third category I spoke of is the hard-core employee, the one who represents a tremendous training challenge, and a person whose behavior patterns differ from those of the other workers. He has not had the education, and his social behavior is different from other employees. I feel the key is understanding, to assist the supervisor to know that he is going to have to work with him a little harder. He doesn't appreciate working hours or certain practices and policies that everybody is supposed to adhere to. He is a little different. We are going to have to understand his motivation, why he does the things he does, and we are going to have to provide him with encouragement. They can do the job, but they need continual encouragement to show them that they can do the job, that they are not second-class citizens. They are every bit as good as other employees, and we want to give them, through training, a chance to demonstrate that they are skilled and that they really can do a job.

I feel the supervisors need as much help in understanding these disadvantaged employees as the employee needs in understanding the problems of business. It is a two-way street. The employee needs a lot of training, but the supervisor needs as much understanding in appreciating the problems of these people as does the employee.

The fourth category is the first-line foreman or the supervisor who has all these problems thrust upon him. I think that many companies tend to look down their noses at the first-line foreman and feel he is not quite as good as upper management. As a member of management, we must treat him as such, keep him informed, let him know what is going on in the company and make this man understand that he is not a low-class member of management but a first-class member. I feel that the foreman is really the first line of supervision, the first line of management. Many companies in the United States have come to realize the importance of this man in recent years. Consequently, he is getting much more attention now than he has in the past. There are many programs to take him out of the shop. We invite some of our top management people to speak to this group and to convince the foreman that he is important, which is something that I think often is overlooked.

Our fifth category, the upper-level management, are the leaders of the company. They decide the directions in which the companies are going, and there is great need to expand their horizons. A technique we use to expand their horizon is to introduce them to new blood. If you talk to the people you are working with all the time, you have what I like to call "in-breeding." You need the introduction of new ideas, and these can be gotten from universities. We send some of our top people to universities both in the local area and throughout the United States to learn the problems of other companies and to learn new ideas and solutions to their problems. We bring in outside speakers to upset the old ideas and broaden the management horizons of some of our people. Creativity needs constant fertilization just like crops do.

We try to provide this fertilization by exposing our upper-level managers to new techniques and new ideas through a variety of techniques.

Ultimately, the responsibility for training lies with the individual supervisor of employees in business. It must lie there, because the supervisor's performance is evaluated or judged by the performance of the people who work for him. If a man's pay is going to be based on the performance of his elements or his unit, then this man must make sure that the people working in that unit are properly trained. If he needs help in providing this training, he comes to the staff people in personnel departments or elsewhere in the organization for assistance, but the responsibility to see that the training takes place is actually his. This is a philosophy I feel that supervisors should understand and appreciate.

These are some of the techniques that we use in business and industry, some of the ideas that we feel are important.

Thank you.

MR. CULBERTSON: Thank you, Mr. Yasinow. The floor is open for questions to Dr. Ginzberg as well as to the three panelists.

MR. ROMERO: American education is based mainly on community work. The horizon for the community quite often is not in agreement with national interest. How do you intend to reconcile the national objectives in the field of human resources with the aims, goals or horizons of the local communities?

DR. GINZBERG: The first point is that I am wary and cautious about whether the people in the National Government always know "what is the best for the nation."

I would like them to have a more modest policy which would leave considerable scope for regional and local adaptation.

The overwhelming thing that impresses me about manpower, even in as mobile a country as the United States, is the extent to which national policy has to be adapted to state or local needs.

Cleveland is a different city from Detroit, although a big industrial city, and it is a different city from Cincinnati in the south part of the state. One can use national policy only as a general framework.

The second part of your question about how do you reconcile economic and social needs would be individual optimization of this whole position. I believe that it is very dangerous to run a society on appeal to patriotism. You may have to rely on patriotism in times of war. I do not want to rely on patriotism in order to produce refrigerators. I want the market to pay mechanics in refrigeration enough as against hospital workers so that the market does a lot of this balancing. I think people ought to try to do the best they can for themselves, and I don't want to regulate and adjust people to social goals when the basic market is working so badly. I do not know whether I have been responsive, but I have tried.

MR. CULBERTSON: Thank you.

Dr. Romero, you had a question.

DR. ROMERO: It is a matter of precedent.

The program says that you were supposed to make a resume. Wouldn't it be better that you make that resume in order that we may go more directly to specific questions, not to general questions.

MR. CULBERTSON: It will be quite possible for me to make a summary in English, particularly of what the three panelists have tried to say. I do not believe that Dr. Ginzberg's remarks require summarization. He summarized them so well himself.

You might recall that earlier I suggested that it would be very good to have from you, as a representative of the delegates, a summary or at least your reaction to the discussion so far.

So my question to you is, "Would you like to present your summary first, before I present mine, or vice versa?"

DR. ROMERO: Perhaps it would be better that I present my notes in order to have a discussion later.

Would you agree with that?

MR. CULBERTSON: Fine, very good.

DR. ROMERO: First of all, I would like to say that I consider the choice of the topic for the seminar to be excellent. The qualifications of Professor Ginzberg make it very valuable for us to know his opinion about human resources, because actually this concept has not yet been studied in depth, with a few exceptions.

When education was oriented to consumption, this could go on its own.

Now education is oriented to investment. Therefore, it is quite important to consider this problem as the machinery of education.

All of the speakers have mentioned we tend to follow books and concepts of a general nature, and this has led us to have educational systems that are not in agreement with reality.

The speakers also mentioned their great concern about the imbalance of education in our field, that is to say, its relationship with the economic and social phenomena. This concern, expressed by the speakers of the United States, is quite true; we should take it into account. We must not forget this is not a matter of investing in education but investing in a rational manner.

Perhaps it would have been quite convenient for one of the speakers to give us details or to refer to a case that is present in the United States, as in the case of the State of Kerela in India. There they have invested the largest amount in education and, at the present time, they are in a very precarious situation economically, because they have created a large number of people who have to leave the region and seek employment in other areas, because the education they received was not the appropriate education.

Also, these speakers have shown their concern about our educational system and the system in the United States, for the United States education system has an economic basis.

For us, this has not been the case; it has been mostly philosophical. We cannot forget that while in all of our republics we developed educational ministries at the time of independence, the United States did not have a ministry of education until recently. This ministry, or department, is not just an educational ministry but includes other programs.

This particular feature of the United States leads us to consider the facts that the only economic aid given by the Government of the United States has been in the field of vocational education. This makes a complete difference in the approach to the problem.

Another point that we would consider as a comparison is the one related to the employment of women in the United States and in Latin America. The problem has not been clearly expressed, because the approach of the gentleman who mentioned the problem has been statistical, and statistics are not too reliable regarding the employment of women in Latin America.

The United States also should consider that they refer to employment in the terciary sector, while in many countries of Latin America, particularly those that have a large Indian population, we have a large percentage of employment of women in the primary sector of the economy. Of course, this employment is not really economic employment, but we do have a large number of women in the field.

Regarding mobility, I think it is quite proper to point out that this mobility may not be beneficial to our countries. The United States considers mobility a beneficial factor within the labor force, but they should not ignore that we do have that mobility. It is completely controlled, and we face the peculiar situation in the employment field of having a great deal of development in the terciary sector, even though there is not a balance in that employment and in the secondary sector.

I also would like to point out the emphasis given by the speakers to the process of information. This process has given great reports in this country, but unfortunately, in our country it is not so effective.

The fetishism that we have toward textbooks has made us to consider education as something that should take place in a classroom following textbooks. It is a good experience and well for us to know the opinion of the American experts in this field.

This brings us to another problem that we should take into account, which is a good example; that is the tremendous importance of the adult education programs in the United States, where all of such training is informal.

Another point that the experts of the United States should consider is that it is very difficult for us to create definite interest in industry to invest in education. This is something that has begun recently in Latin America.

Once again, we have to praise Brazil which initiated, through the national apprenticeship program, the road to solving this problem. This is a very slow process, and it will take us many years to solve that problem.

Something that impressed me a great deal was what was mentioned regarding the agricultural sector. The agricultural sector should have the greatest attention, and this is something that we should ponder about in our desire to go into industrialization. We will not achieve much if we do not first solve the problem of the agriculture sector. There are the exceptional countries where a great deal is being done in the rural area. But, as the speaker said, it would be difficult for us to achieve the degree of industrialization that we want, if we have not developed first the agricultural sector as a means to improve the industrialization process.

Mr. Levine said something for which we are grateful. He praised what we are doing in Latin America regarding the tax that is withheld to invest in education of a technical nature.

It is encouraging to us to hear his comments. These will help us to maintain this contribution or even to increase the contribution to those institutions.

It is also true what Mr. Levine said about education. He knows education, and he knows how wasteful education can be. We know that situation, and we know that in some cases this has been true of the agencies that are working in the political sphere in our country.

In many instances, they have promoted types and forms of education which have been solely based on political consideration.

Regarding what Dr. Keegan indicated, he said that we are right in a way not to have made the first concession in vocational education for utilitarian purposes only.

It is necessary for our friends from the United States to realize that in all of our countries vocational education has a humanistic basis. Usually 50 percent of the training will be in educational matters of a general nature, and the other 50 percent will be practical workshop training. This is in agreement with other comments heard this morning.

We must reflect upon the difference between the United States and our situation with respect to the trend in training. It is necessary that our friends in the United States realize that their problems are a matter of readjustment to the few changes, as the adjustment of a factor to take into account a new technique of production.

This is not our problem. We have to do that and besides that we have a handicap in that we must train new workers.

We cannot give to vocational education as much as other countries do, and we have to make it somehow humanistic because we cannot specialize. Our system has to have a different orientation which will help us to solve our problems in order to adapt our manpower to the changes that we are experiencing right now.

Dr. Keegan stressed the aspects of formal education. These are very interesting and we should consider them. Actually we are not too concerned in Latin America about these aspects because formal education has been the only type of education we have had for many years. As I said before, it is something like fetishism among us, so I will repeat what a distinguished American economist, Dr. Schultz from the Chicago School, said:

"We are interested in the aspect of human capital and the formation of human capital." We do not want to have a formal approach within education but we must admit that in the past we have done a great deal in the field of formal education. Now we have to turn to informal education, so the problem is not the one that Dr. Keegan expressed.

Dr. Keegan also mentioned a great deal about adult education. We also want to thank Dr. Yasinow for what he mentioned about the splendid work that has been done in the Cleveland Electric Illuminating Company. We saw from his explanation the whole process of adult education and this is extremely interesting for us.

Among the problems that might be useful to discuss now would be: to what point we would be able to use the adult education techniques that are being used in the United States?

It may be also useful to know, at least I would like to know, up to what point we could receive more direct assistance and a greater assistance in order to organize the study of human resources. Perhaps we could do it through CINTERFOR, in order that the studies would be a solid foundation for those who are restructuring education and for those who are in the process of initiating new programs in the field of vocational education.

I hope that I have given the highlights of what I wanted to say. I don't, in any way, pretend to speak on behalf of the members of the Latin American delegation here present, but Peru is a country which occupies a position between the countries with the highest development and those of less development. I hope that this explanation will be useful.

Thank you very much.

MR. CULBERTSON: Thank you Dr. Romero

MR. CULBERTSON: I especially appreciate what he has just done, to capsulize the morning's session, and not only to summarize each of the speaker's comments, but also to interpret them in terms of the differences between Latin America and the United States.

My summary of the morning can be stated in very few words. As I listened to the discussion, it seemed to me both Dr. Ginzberg and the three panelists were basically saying one major important thing, that education, particularly scientific and technical education, has taken on an entirely new kind and level of responsibility than we have thought in terms of in the past.

Those of us working in the field of education have new responsibilities for development before which we pale because the responsibility is so heavy.

For example, Mr. Levine reminded us that in the field of education, particularly technical education, we need to be thinking in much broader terms about our responsibilities with respect to wage policy, with respect to income distribution, and also with respect to new techniques of education.

Dr. Keegan talked to us about new horizons in education, pointing out that the most theoretical education, in the light of technological developments is likely to be the best. Dr. Yasinow spoke in terms of the importance, the essentiality, of totally new techniques in training within industry.

It seems to me that all of this has to do with a new recognition of the relevance of education to development. The importance of education to economic and social growth is increasingly recognized, and it might even be said that it is the most single crucial area for economic and social growth today.

As I said earlier, ministries of development, ministries of planning, ministries of finance, USAID missions, World Bank missions and Inter-American Bank missions are finding that they cannot really solve problems of development alone, or case by case, or even make sufficiently accurate and adequate sectoral analyses to come to grips with more than a small proportion of the problem.

Dr. Romero, in saying these things, much better than I have, and much more completely, did an excellent job. And I am speaking to the participants who don't have simultaneous interpreting equipment now; in terms not only of each speaker's main comments, but the differences between where we find ourselves in the United States today–the topic of the speakers–and what this means in terms of Latin America. For example, while it may be true that we are moving, in this country, toward management of industry and commerce, and so on, by an elite of top management and technicians, we wonder about the role of the educated or trained worker in Latin America–they are still trying to form the cadres of workers that are needed to get their economy moving.

Dr. Romero spoke of the fact that the United States didn't even have a ministry of education until recently, and still it is not a ministry of education; it is only part of a larger ministry. But he pointed out that education in America is organized differently, which really relates to the question the gentleman from Brazil asked. Perhaps it explains in part that while we have national programs and national policies and national consensus of various kinds, education is a field in which application of national aspirations and so on is left to the communities.

Whether this is the direction in which Latin America will wish to go is a question that I am not prepared to comment on, but it is a question.

Dr. Romero also pointed out that we had not talked enough about the field of secondary education, which is a much more crucial field in Latin America, I would say from my limited experience, than it is here. In this country we have already achieved universal secondary education, by and large, which makes the problem considerably different.

In connection with the major issue raised by Dr. Ginzberg regarding the importance of investment in education along with capital investment, Dr. Romero pointed out that is is still difficult for the businessman, the industrialist and so on in Latin America to think of investing very much in education per se.

With these comments, the floor is again open for a couple more questions. I would like to ask if there is anyone here at the table, or down there at the table, who has a question of a panel member or of Dr. Ginzberg, or who has a comment to make. Again as I throw the floor open, may I thank Dr. Romero for a superb summary.

Any other questions, comments?

Yes.

MR. SCHLESINGER: I have two questions, or two points. The first is a question and the second is an expression of hope.

First point: It has been said that there are sufficient funds in Latin America to face the problems of training. Latin America is a vast area, an immense area, that includes different countries, and this may be true for some countries, but unfortunately, not for all. As for Guatemala, such a favorable and optimistic opinion is not true, is not applicable. I agree that one has to leave the classrooms to go into the shops and go into the plants, into the farms, into the trades, into businesses; but in view of the shortage of funds, it is necessary to use certain caution in the use of these funds.

Now, the question is: In this case, can we neglect the human objective and dedicate ourselves fully to the short-range development or short-range planning, short-range training?

The second point is the following: It has been said here with much accuracy that development cannot exist without a balance between training and investment. Unquestionably this part is a consensus of the meeting. But I ask–I wonder if the bankers will think in the same fashion, those who provide the funds. From my experience in Guatemala, Central America, the bigger credit institutions have done something about training, but generally speaking they have dedicated themselves only to the training of banking technicians.

Any influence whatsoever that this meeting could have, this CINTERFOR Seminar, in the sense of reinforcing the concept of the significance of training, vocational training, and professional training, in the very large credit institutions, would be an immense contribution on behalf of the development of Latin America, or least of those smaller countries and the less-developed countries on this continent.

Finally, I want to congratulate CINTERFOR, and I want to express my thanks for this excellent conference and its influence on the development of Latin America, or at least of those smaller countries and the less-developed countries. I also want to express may thanks for the high-level of the speakers.

DR. GINZBERG: As I understood you, you have two points. First, how do you find the proper balance between using your limited money for short-run training so that people could become quickly productive, and at the same time have a deepening of the skill base so that the economy has the potential to advance over time.

Realizing that historically Latin America has been little concerned with making connections between education and productivity, I would think there would be great advantage to putting emphasis on the short-run. In a certain sense, policy is always a question of making a shift from where you have been, and since you have not been concerned with the economic returns for investment in education up till now, I think emphasizing the short-run might have some advantages as a present contribution to the climate.

I would also emphasize something about the United States. We are a very rich country, but we are not rich enough, in my opinion, to have elongated educational and training systems as much as we have. I think that much of the problem of student unrest in this country is due to the fact that people stay in schools too long. It is not even a question of whether we can afford it, we have just prolonged the whole developmental process too much in the early years of life. I would again say that from our experience a somewhat sharper objective for the short-run would be important.

On the question of how do you get the bankers and the lending agencies to be more aware of the problem of investing in human resources, there is some evidence that they have begun to understand the problem. Bankers are stupid, like most people, so they learn slowly. They need training and the training that they're getting is through losing on a lot of loans they've made. Slowly they understand what went wrong with those loans. What went wrong with them was that there weren't people to make effective use of the money. You now have the World Bank and the International Development Agency beginning to put out more and more funds on education.

You heard Mr. Culbertson say that the State Department has learned new things. It takes a while, but they also learn.

I think one can look forward to the bankers learning, the State Department learning and the outlook, I would say, is better.

MR. CULBERTSON: I think we'll undertake one more question before we close the morning session.

Yes?

MR. BAQUERO: One of the most difficult problems in Latin America is the separation between formal education, technical education and professional education in the school, and the education and training outside the school. Although this may not have adequate answers, it is a difficult subject and that's precisely why we're here, to clarify things that are not easy. It seems to me that the United States has resolved this difficult situation that exists in Latin America. In the United States the vocational and technical schools are not fighting the training that exists in the labor unions, in industry, etc.

In the course of this meeting, I hope we may be able to find some type of formula that might be applicable in Latin America so that this separation in these two types of education is narrowed.

MR. CULBERTSON: Doctor Ginzberg said that technical education is the business of everybody and he may want to elaborate on this.

DR. GINZBERG: Just as the economy of every country developed and developing is not really subject to simple planning and pre-structuring, the training system itself has a kind of organic growth. It is not a question of having a convention within your country or another country and asking the employers and the trade unions and government to sit down and figure out a new structure. While it may be helpful to bring them together periodically, the real problem is of two levels. The first, how do you get major parts of your society that should be training, and are not now training, to do some training. I think that one of the big tasks is to make clear to people, through case studies, the economy of training. We don't want people to train because it's expensive. We want people to train because it's efficient and economical. One of the problems is to collect the kinds of information, case studies, which both indicate the advantages of training and the least expensive ways of doing certain things.

The second problem: Since you do have in most Latin American countries a certain amount of funds for training specifically from your payroll tax, I would strongly recommend that a piece of that money be used for experimental purposes. Try to relate some of these institutions, one to the other so that you can say to an industry that was willing to do part of the training, "We'll pay for the part that has to be done or should be done in school," so that you balance this out.

There are no single gadgets or answers. What must be done is to find the adaptive mechanism in the different situations that you have, because you've analyzed your problems correctly. Plan the next step or two steps that will be the most sensible way to move, and prove it to a lot of people so that they begin to do their part of the job. What I understand by development is getting human beings, in positions of influence and power, to understand how they can do things better for themselves and try to get them linked with other groups in the society so that the society as a whole begins to move.

We have not mentioned the population problem at all today, though we have talked about education, agriculture, development, etc. I believe, from my general views in other parts of the world, that a certain amount of basic education is essential to get changes in the farm sector, either to improve farming or to get new views toward the number of children they should have. Unless one gets a new attitude towards the future built into a conservative culture, you cannot get ahead economically.

Economic development is primarily a transformation of values and among the challenges for Latin America is this question of education, the farm population and population control.

MR. CULBERTSON: Thank you very much. Dr. Keegan has a final comment on your question.

DR. KEEGAN: I was much taken with Mr. Romero's preceeding remarks about case studies. He mentioned the national case studies and there are others, some in the field of private education in relation to private industry. One case is Monterey Technological in Monterey, Mexico, an institution largely created by private capital, an institution which has on it's board of directors the directors of most of the large industries of Monterey. It's programs of education are directly related to the needs of industry of that region. A very large subject both in the United States and Latin America is the relationship between private and public education. It is worth noting that in Monterey there is a state university which coexists with the private university of Monterey Technological. Private industry is probably more responsive, in this case at any rate, to the private university than to the public. I think the notion of case studies could be extended to that of interesting university-industry relationships in many countries of Latin America.

MR. CULBERTSON: Thank you very much. I hate to draw this session to a close. May I thank Dr. Ginzberg, Dr. Keegan, Mr. Levine, Mr. Yasinow and Dr. Romero for their contributions this morning.

Thank you very much. We're adjourned for lunch.

PROCEEDINGS—AFTERNOON SESSION
September 9, 1968

MR. MCVOY: I want to introduce to you the chairman of the afternoon program, Dr. John P. Walsh. Dr. Walsh has a unique experience in this dual field of training and education. He has been involved from the school side, industry side, labor side and government side and is now in a fifth category, one of our leading private institutions in this field.

DR. WALSH: Good afternoon, ladies and gentlemen. Let me express to you my own personal pleasure in being here and extend greetings to my colleagues in Latin America who are involved in this great work of vocational training. It has been my past pleasure to have represented the United States in the formative stages of CINTERFOR and to have had the opportunity to visit in many of the Latin American countries to see the work of the great manpower institutions that you represent, agencies such as SENAI, SENAC, SENA, INCE, CONET, and others. I consider this a personal privilege to be able to participate in this interamerican meeting here in Cleveland, Ohio.

The purpose and the objective of this panel will be to explore the economic and social factors which have played an important role in influencing the development of training patterns here in the United States of America. Let me introduce the members of the panel.

Representing the public vocational education sector is Dr. Robert Reese. Dr. Reese is a Professor of Education at Ohio State University, performing especially in the field of vocational education. He has an interesting background of experience. I found him involved in the industry of this nation and as a teacher in a vocational school, as a supervisor at a local level and at the state level in the great State of Ohio and as a teacher-trainer preparing instructors to man the programs in the schools. At one time he was the Vice-President of the American Vocational Association representing the great and important field of trade and industrial education. So we welcome Dr. Reese to the panel for the great depth of experience and knowledge that he has in the field of vocational training and education.

The second member of our panel is Mr. Peter Stoicoiu. Mr. Stoicoiu represents the private manufacturing sector of our economy. He is currently the Training Director of a great company here in the Cleveland area, the National Acme Corporation, where for six years he has been involved in the development of the work force for that company. He places his greatest emphasis on supplying the trained manpower that is needed to meet his company's own needs. He will bring to the panel a great wealth of experience from the on-the-job side of training within the enterprise.

The third member of our panel is Mr. Clarence Eldridge, Chief of the Division of International Activities of the Bureau of Apprenticeship and Training of the United States Department of Labor. He represents the government side on our panel. At present, he has responsibilities in developing skill improvement programs for foreign officials who visit the United States and the programming of people as they travel throughout our country in studying training methods in our industries. He also has had varied and interesting experiences in the industrial sector.

We have a balance here representing the public sector in education, the private sector from our industries point of view and the government from its role in promoting the development of apprenticeship and training in the United States.

Our topic, simply put, is "Factors influencing training patterns in the United States." I think almost everyone of us in this room, engaged as we are in the important work of vocational training, would agree that for training to be effective and efficient it must be responsive to the times, relative to the needs of the economy and of the people and meaningful to the individual and to the society that it serves. Thus, over time, there are a multitude of forces that are at play that tend to shape the patterns of the programs that we would establish to meet those needs. And so it is that the development of vocational training activities in the United States is the result of a number of forces at play over the years.

Briefly stated, these major factors could be categorized as economic and industrial development, population and attendant labor force growth, scientific and technological advancement, increasing educational aspirations and attainment on the part of our population, an increasing standard of living, an increasing gross national product, and the requirements for national defense. Each and everyone of these factors has had some part to play in moving the establishment of our training effort in the United States.

In the early years of the development of the United States, beginning with the period of colonization, the demand for skilled workers was met largely by immigrants who brought skills with them from their mother country. For many, many years immigrants were the chief suppliers of the skills that were needed to build this nation. With the advent of the industrial revolution and the emergence of entrepreneurs competing in a free enterprise system, the demands began to grow for a work force with a much wider range of skills. Many of the early attempts of apprenticeship fell short of meeting the continuing demands of a growing population. As the mechanization increased and the demands for goods and services to house and to feed the growing nation increased, so did the concern for the development of mechanisms to train the work force.

As early as 1820, a manual labor education movement among unorganized craft groups began in an effort to introduce trade instruction into certain schools of the nation. Borrowing on the idea of the mechanics institutions that were established in England back in 1798, similar mechanics institutes began to appear in the United States, after 1820, aided by private philanthropy. Indeed, it was some of that private philanthropy that brought into being Dunwoody Industrial Institute, the Institute that I now represent. It was established back in 1914 with a legacy that was left by one of the great industrialists.

We began to see much of that kind of development coming from individuals who sensed the need. William Hood Dunwoody, who established my institution back in those days, recognized that the educational system was beginning to generate in a way that would provide only for general educational development. Great efforts were given to supporting a college and university system. He saw the entire lack of provision for the development of the skills of the people who would flesh out the work force of the nation and made his endowment to begin such training in my city.

And as these kinds of actions began, so began the period of social unrest that ultimately culminated in the public vocational education movement in the United States. It was in 1917 that the first Federal Vocational Education Act for training of less than college grade was passed by the U.S. Congress, and a Federal Board for Vocational Education was established. This was the beginning of public policy in this nation in support of the training of the workers who would flesh out the work force of the nation.

In the half century since this early beginning, considerable adjustment and change have occurred in order to keep pace with the economic and industrial development of the nation. Indeed, over that period of time we saw moves that took some of the training out of the schools and moved it into a cooperative arrangement between the schools and the industry, where much of the work needs to be done. To sharpen this focus in the area of vocational education in the public, we will turn to Dr. Reese a little bit later.

The industrial revolution in this nation stimulated the inventive genius of the nation, and coupled with the scientific and technological advancement, the U.S. industrial giant began to grow. To fuel the growing economy and satisfy the needs of a growing population with an increasing standard of living, the free enterprise system began its continuous growth of manufacturing establishments and productive facilities to support a geographically expanding nation of cities and a sectorial shift began from agriculture to the manufacturing way of life. Indeed, my economist friends could talk about four sectorial shifts that were underway in this nation. The first, of course, from the primary to the secondary or manufacturing sector is long gone by. We have gone on through the tertiary sectorial shift into the service industries and now, my economist friends tell me we now have before us a quadrinary sectorial shift in the area of supporting the whole sphere of activities of recreation.

These changes take place as our economy grows and, accordingly, our training must follow and keep pace with it. The demand for workers to flesh out the work force was not being fully met, either by the vocational school or by the budding apprenticeship movement. So the enterprises themselves began to look inward for the development of the competence of their workers. The beginnings were made for in-plant training programs. As the industries grew in size and complexity, the concern was intensified and efforts were expanded to include skilled workers, foremen and supervisor, managers and even executives. Management's efforts for us will be sharpened up by Mr. Stoicoiu during our panel presentation.

Another great force that had an impact on training patterns in the United States was the blossoming of the organized labor movement. As organized labor gained strength and fought against some of the early child labor practices and sweat shop conditions, there resulted over the years an improvement in the wages that were being paid, a shortening of the work week and fringe benefits that extended the vacation periods and retirement plans for the workmen.

This in itself added impetus to the demand for more competent workers, and training was the obvious answer. Labor and management cooperated in the venture by giving support to joint apprenticeship councils for the support of organized apprenticeship. To further promote apprenticeship programs, the United States Congress passed the Fitzgerald Act in 1937. This phase of our training development will be highlighted during the panel presentation by Mr. Eldridge.

Organized labor didn't stop just in that promotional activity. It continues its concern for the development of the competence of the work force members. Training has become a major force of the unions, not only as exemplified through union support for training legislation, but also as demonstrated by the emergence of training technicians, training staff, programs, schools, books and the like that are run by the major unions themselves and supported by fund sources that are negotiated in union contracts.

On the other hand, as an education conscious public sought to improve its competitive posture, it generated a system of schooling that included more and more of the people for longer and longer periods of time.

In the early days of the nation, it was not uncommon for our youth to be available for employment at the completion of the elementary school. Now our youth remain in school through high school and public education is extending its activities beyond high school years, including more and more people. Even so, a large number of young people dropped out of the schools and, in some instances, forms of segregation by race have resulted in inferior educational programming that now shows up in the poor and disadvantaged segment of our population. Usually, this group found itself also deprived of the advantages of the burgeoning vocational school programs of the country.

The net result of the complex of forces at play in the educational arena has delayed entry into the work force on the one hand and on the other hand set up barriers to the entry of young people from the disadvantaged group who lack the capability to cope with the system.

During all this time, the incessant pace of technology in transition resulting in the shifting of occupational categories in the work force brought about some technological disemployment. At the same time, technological advances have placed higher and higher demands on the skills of the work force. To meet the needs for training of the unemployed, underemployed and disemployed, the United States Congress passed a landmark piece of legislation in the Manpower Development and Training Act of 1962. As a result, efforts of vocational schools have somewhat been regeared and the private sector has responded in developing trained programs that are geared to meet the needs of a much wider segment of our population, including these that are disadvantaged and shut out from previous work force participation.

Indeed, the private sector is joined in a partnership with the Government in opening up employment opportunities and establishing special training programs aimed at the development of skills and attitudes to generate employability and work competence on the part of these disadvantaged individuals.

To meet the demand for competence within the public sector and to generate the necessary defense capability for the protection of the nation and its people, the Government, itself a major employer, has become an important force in influencing training patterns in the United States. To meet demands for a wide range of skills to support, the Government establishment, the United States Congress passed the Government Employees Training Act in 1958. Now major government departments participate in direct training in a range of skills which run the gamut from secretarial to computer programming, to supervisory, to executive, to maintenance, to traffic controlling and the like.

Similarly, the Department of Defense, in order to man the defense establishment, has become a major training force as science and technology places added demand on civilian, as well as military manpower needed to support the effort.

It becomes quite obvious that numerous forces have influenced the development of training in the United States. In order to meet the multifaceted demands, there has emerged a multiple thrust response in the field of training. This evolution can be seen in the growth of public vocational education programs, the growth of training programs within industry and within organized labor, the growth of apprenticeship training, the growth of training within the Armed Forces and the growth of training within the government.

We have not put all of our eggs in one basket. We have gone down a multiple route in stimulating the development of the human resources of this nation to match the capital input that is being made to build the economy of our nation. This, then, is the complex of training efforts within the United States. Each thrust is itself worthy of some consideration, and that is the purpose of our panel here today.

I would like to call on Dr. Reese to have him bring into focus for us the activities that generated the program of public vocational education in this nation.

Bob.

DR. REESE: Thank you, Jack.

It is certainly a pleasure for me to be with you ladies and gentlemen who are visiting with us from other neighboring countries in our hemisphere.

As has been indicated, public education was developed in the United States on the premise that all people in a democracy needed to be prepared, not only to understand but to participate in local, State and National Government. It is evident that our national leaders were awakened quite early to a need for minimum education for every citizen, and, as a result, by 1870, or approximately 100 years ago, the American people accepted universal elementary education for all youth.

The development of our secondary program, however, came to us somewhat slower and grew out of a private academic or prep school program, which was organized to serve those citizens preparing for entrance into the university or the college.

Naturally, I suppose, when our secondary education program began to evolve, it retained basically the same type of academic program as these previous academies and preparatory schools had provided. This academic program, to us and to many leaders in these early days, had outlived its usefulness, because it no longer met the needs of the mass of our population who were now enrolled in our public secondary schools.

Two factors, I think, brought about the great expansion in enrollments at the secondary level. One, of course, has been mentioned, the compulsory school age laws which require our young people to stay in school at least a minimum number of years. At first, it was generally through the eighth grade. Later it became age sixteen in many states and in a few states eighteen years of age.

The second element was the child labor laws which prevented children under minimum age from working in industry. These two things forced our young people into the school situation.

About the turn of the century, as Dr. Walsh indicated, many government, education, labor and industrial leaders began to voice concern over the inappropriateness of this academic education which again was meant only for those who were preparing for the university and not for the mass of our population which generally entered employment immediately following their formal schooling at the secondary level.

As a result of this interest, strong forces developed which began to seek ways of making our high schools truly comprehensive in terms of serving all students regardless of subsequent goals.

It might be well here to devote some time to the more relevant social, economic and political influences and factors which resulted in the development of public vocational education in our country. The first and most important factor was the desire to provide equal opportunity to all of our citizens, recognizing both different desires and different abilities.

Our desire to develop a process for teaching children who frequently do not respond to textbook learning alone, but learn best through some active participation, was an influence.

We also feel that another factor was the indirect but positive contribution that needed to be made to the program's aim to develop productive citizenship.

The need to attain equality in the dignity of those performing manual work with the professional worker was also a serious element, and it brought about much of this development in the effort to smooth out these different levels.

Another factor was the desire to provide a higher standard of living for all of our people through increased productive skills, helping each individual develop to his maximum potential, to himself, to his community and to his state and nation.

There was also some evidence of industrial and social unrest resulting from the absence of a practical and useful training program for workers that received recognition at that time.

There was also a tremendous search for and great discovery of natural wealth and natural resources. If these were to be adequately utilized for our citizens and for our country, we needed the skilled manpower to work these resources and to develop them into useful products for our people.

The industrial revolution has been mentioned. This was a tremendous factor, not only in the expansion of industry, but the subdivision of the skilled crafts in many instances into operator or semi-skilled worker jobs and in the multiplication of the numbers of people working in the various industries.

New restrictions on immigration that came about in the early part of the century has also been mentioned as a strong factor. No longer were we able to bring into this country the skilled manpower needed.

The apprenticeship system had failed in these early days. We had brought the apprenticeship system from Europe, but it failed in terms of its ability to provide even a minimum of skilled workers essential to our industrial development.

There is also a strong belief in the people of this country that human resources are our greatest wealth and that each and every one of our citizens has a right to a meaningful educational development, not only from a cultural standpoint as an individual, but also vocationally as a productive citizen.

This was an element or rather a factor that had and is still having today a great deal to do with the development of our public vocational educational programs.

The tremendous waste of human resources through inefficient work was recognized. In most instances this resulted from haphazard training or lack of training in the various segments of our economy, not only in agriculture, but industry, the building and construction fields, service occupations and many others.

We also observed, at about the beginning of this century, some rather startling developments in other countries. Sweden and Germany especially made some serious strides in developing vocational and technical programs. Individuals visiting these countries returned with many new ideas. One of the greatest factors in the development of public vocational education was the great need for continuance of vocational training programs for youth and adults who are out of a school or beyond school age, for those who either need to retrain or to be upgraded in their productive ability, skill and technical knowledge.

From the earliest development of our vocational educational program in this country, beginning about 1906 through 1917 when the first public national act was passed, a debate occurred on whether we should have a separate vocational educational program in this country and ignore the general or public school system, or whether our vocational education should become an essential part of public education. In other words, a decentralized system of vocational education.

The fact that we had engineering schools, medical schools and other kinds of professional colleges in the same universities with the arts colleges certainly must have caused people to feel that we should join vocational education and public secondary education together rather than establish a separate system.

Our political leaders have always felt that the chief responsibility for education generally rested with the individual states.

Within these states, there has been a strong tradition for keeping the detailed operation of educational programs as well as much decisionmaking under control of local administrative boards.

These traditional provisions have been recognized in all of our subsequent legislation. The role of the Federal Government has been one of stimulation, encouragement, leadership and maintenance of standards and cooperative relationship with state educational agencies.

These state agencies have assumed the responsibility for establishing minimum operational standards, program development and directing, consulting services through local boards. Local schools in turn generally have initiated programs, constructed facilities, employed qualified personnel, selected the students and operated the instructional programs.

Thus, we find a three-way partnership participates in public vocational education in this country, and we believe there are certain advantages to this partnership.

One of the more basic of these and perhaps the strongest is that it provides for a joint effort at several government levels while being administered near the operational level close to the local citizen and to the employers.

We find that employers and citizens alike support that in which they are involved, so we think that is a strength.

It also brings about a close interrelationship between general or academic education and vocational preparation so that the student in the vocational program begins to see some usefulness to the general areas of study in which he may be enrolled.

We believe this type of cooperative relationship also brings decisionmaking down to the operational level which provides fewer delays in making decisions or making changes and adjustments as the need may dictate.

We believe that the program financing has an advantage in that is is not dependent upon any one source of funds but on a combination of Federal, State and local monies.

One political subdivision cannot cause great harm to the program. There have been cases where income has been reduced from one income source and the other two sources have made up the difference.

Another strength is the ease of maintaining close ties with the participants in the program as well as the employers.

Both labor and management are represented on representative advisory committees for our local vocational programs and, in this way, have a voice in the development of the program and in maintaining it in keeping with local needs.

The cooperative three-way relationship reduces political pressures to a minimum, since no one agency can place undue political influence on the decision making at the local level.

Since public education has a responsibility to all citizens and to all people and has no direct ties with any one employer or group of employers, it treats all alike and thinks in terms of the needs of the economy, the needs of employers generally and the needs of our young people and adults, not of a particular type or size of employer.

Programs can be maintained more flexibly. It is easier to experiment and change at a local administrative level.

There has always been a feeling that education ought to be administered close to the people and to the economy.

States do not follow exactly the same policies in the development of public vocational education programs. There is variety among states, because states do try to do things differently. They follow the overall basic policies and principles, but they interpret and apply them differently, and one of our strengths is having national leaders pass on from state to state new and different ways of operation that have proved to be valuable. In this way we have an experimental situation across the country as every state has some unique ideas to offer.

Operation through public vocational education makes it possible for the curricula to be developed closer to the employment demand and to the community. Our leaders that developed the early programs of vocational education thought it ought to be retained as part of the total educational program.

We do not like to see a competitive atmosphere between so-called cultural or academic education and vocational education. Both are necessary, but much of our time is spent trying to bring a balance between them.

It would be unfair to point out the advantages if I did not mention that there are some disadvantages that we recognize.

The most serious may be that vocational education may not have competed favorably with academic education because of the academic atmosphere. Most administrators were academically prepared and understood academic education but not vocational education.

This is less of a problem today. In fact, the difficulty today is to keep up with the demand of academic administrators to bring the programs into their community.

The operational qualities and program size may vary in different sections of the country. There may be a lack of interest at the state level or at the local level to develop in terms of national policy.

State and local communities may be slow to take action to meet the needs in certain sections of our country and may not have adequate funding, appropriate equipment, competent staff by which they can establish quality, successful programs.

Local educational authorities may be less perceptive to national needs and goals than state or national leaders. Through the three-way active relationship, we believe we can overcome some of these working cooperatively in the program.

In this short time it is difficult to describe all of the factors involved in the development of our program which was initiated in 1917 as a result of national legislation. Much legislation has been passed since then, the most recent being the Vocation-Education Act of 1963 and the 1968 amendments, to further expand and promote additional vocational education.

While education for the industries, construction fields and all the other industrial concerns is of major consequence, one of the largest secondary programs is agricultural education for the agricultural economy. The business field, distribution of goods and services and the homemaking field are also supported by major programs.

The tremendous growth and expansion of the program, particularly in the past six or eight years, makes it the most rapidly growing and widely accepted program in today's educational family. The system is showing that it can succeed as such a program.

Our state of Ohio has 36 joint vocational schools approved. These are schools established in central locations that will serve the public secondary schools in the surrounding area of from one to five counties.

The trade and industrial education enrollment in the state of Ohio doubled last year, and we expect to double again in two years.

We need to upgrade and find new ways of preparing teachers. Most of our teachers come from the skilled occupations and the technical fields of industry. One of our major jobs is to give them the essential skills of teaching.

We do not believe that vocational education is intended to supplant liberal education but to relate to it so that workers can prepare themselves for a vocation and at the same time relate culturally to the professional workers.

We would like to feel that our whole labor force, whether professional, technical, skilled, semi-skilled, etc., maintain certain relationships that help build a strong unification within our total economy.

Thank you very much.

MR. WALSH: Thank you, Dr. Reese, for that layout of our public vocational education program.

Now, we turn to the private sector to hear what takes place within the enterprises. For this presentation, I present Mr. Stoicoiu.

MR. STOICOIU: Ladies and gentlemen, as an active member for over 14 years in the Cleveland Chapter of the American Society for Training and Development and on behalf of our Chapter President—and it is over 125 members—I extend to all of you today a welcome to Cleveland, Ohio.

Before I get into my topic today, let me impress upon you gentlemen one important thought, that all education and training should be geared first and foremost to the needs of business and industry.

Many educators and politicians seem to have forgotten this vital concept. Business and industry can easily be stunted in their growth, or even forced to relocate, if trained labor is not available.

The expansion of new plants can also be affected by lack of trained people. Not too many years ago, our company decided to expand into another area. One of the prime considerations was the kind of trained people available.

I find no fault in turning out trained people in many of the supporting miscellaneous industries. But let us remember one important fact, that the bulk of taxes comes from business and industry.

The key to your success will be largely measured by your ability to fulfill the need for trained people for business and industry in your country. Having worked in the metal forming and the machine tool industry for over 19 years, I have seen many changes take place in the attitude of management and the union concerning industrial training. Many of the factors that caused these changes were external, or outside factors.

I should like to relate a few of the highlights that may be of value and help to you.

Some of our vocational high schools have not kept pace with the demand for trained high school graduates to fill the needs of business and industry. By trained high school graduates, I mean those young men and women who have job skills applicable to business and industry. Even though there is an increase in the number of students in our school, the number of trained high school graduates is decreasing.

Some of our schools and some of the areas have gone to the comprehensive high school concept, which combines college preparatory with vocational students in training. The biggest argument against comprehensive high schools is the fact that the vocational part is downgraded; it often becomes lost and the college concept overrides it immensely.

A survey just completed by the American Society for Training and Development and the Manpower Research Council stated that in this survey most of the personnel experts believe that skilled training falls far short of meeting the requirements of business and government. They pin the blame primarily on the public high school and the vocational school. The courses are not tailored to the needs of the business world, despite the fact that local institutions are being provided with the specific requirements of industry.

As a result, more and more companies, including the National Acme Company, have set up in-plant training programs to make available the type of job skill training that was not obtained in a high school.

These programs range from a two- or three-week refresher course, to a six- to twelve-month comprehensive program. Many other companies combine on-the-job work with schools in order to bring an employee up to the minimum job skill level.

Today, we live in a society where almost every parent wants his son or daughter to be a college graduate. This is all well and good, but you only have to look at the published figures to see that a large percentage of them do not make it. At the same time, the need for technical and engineering trained personnel is very serious.

This has also necessitated working out special programs with local universities to train and upgrade our own people to meet our specific needs. College programs on updating staff people have also been increased. At the present time we have a unique program here in the local area at John Carroll University in which we have a two-year program in professional management, one of the first in the country.

The shortage of engineers and the rapid development of technological progress has developed a relatively new occupational field. This is the two-year college level technician. The opportunity for the use of technicians in business and industry has increased tremendously. According to the survey made by the American Society for Training and Development and the Manpower Research Council, 85 percent of industrial relations and personnel executives stated that more two-year technical schools and colleges for high school graduates are needed to remedy the acute shortage of help.

This survey included 930 companies throughout the United States with over 4,300,000 workers covering all aspects of industry.

In Ohio we have 14 technical schools, and the number is growing. The greatest demand on our technical schools has been in the engineering-technician area, mainly mechanical, electrical, chemical and industrial.

We have been able to take a two-year technician and train him further in other areas of our company. After six years of experience, we are now advancing these technicians into plant and office supervision.

Our experience with engineering technicians has been excellent. We have a problem here in that we need more technicians than are being trained each year. There has been a trend in some areas to establish technical schools as a part of the community college or university by granting an associate degree. The tendency is to lose many of these students to a four-year program. Industry would like to have these students continue training beyond the two-year program when they are employed, and many companies, including ourselves, have very good tuition refund programs.

The greatest impact affecting training patterns in recent years has been in the employment of minority groups. This has necessitated revision of many of the employment practices and training procedures. The Federal Government has instituted many programs in all areas including Federal money grants to industry.

Some of the programs have concentrated on training the unemployed in job skills. Other programs are set up for basic remedial education and job readiness orientation, paid work experience in public and nonprofit organizations and training to move unemployed persons into stable employment. Time does not permit us to discuss all of the programs in use today, but unions and management in specific industries are adjusting to this challenge.

We are using more and more of the latest techniques, such as programmed learned material, teaching machines and video tape. These training tools make it possible to learn job skills quicker and more easily.

Our company has established scholarships in technical schools for minority groups to encourage more young men who are finishing to further their educations.

This summer we finished what we believe is one of the first programs of its kind in the country. We call it the summer school learn-to-earn youth program. We took 12 intercity high school youth and paid them to go back for the summer into a job skill area in which they were training. Our success has been excellent with this program, and attendance was over 98 percent in the nine-week program. We feel that there are very few other programs that can match this achievement.

We have set up another unique program with one of the local training schools in the area and are making this available to any employee who does not have a skilled classification. It is basically a 160-hour comprehensive course covering the fundamental operation of lathes in one area, milling machines in another and grinding machines in a third. Included in this course are related math, blueprint reading and necessary supplementary program material. The response to this has been very good.

We have thus made available to any employees who desires to upgrade himself the opportunity to do so. At present our plans are to make this program a regular part of our training function.

The impact of numerical control or tape machines in industry is another factor that is influencing training patterns. Some of our older employees have been reluctant to change. However, with a very thorough orientation and introduction to the machines, the adjustment is usually accomplished. Our electricians also have had to go back to school and come up to date on the electronic maintenance of tape machines.

All of our plant and office supervisors affected have been to school learning what these machines will do. This has had a very good effect on the acceptance and proper use of the equipment. We have recently installed a computer in our company, and the effect of this change is spreading throughout the whole organization. Training classes are going on constantly under new techniques and systems that will be affected by the computer.

Because of the technological explosion and changing work force, management and unions are working closer together to solve the many and varied problems.

Training and updating all levels of employees has become a continuous training process reaching from the president down to the semi-skilled operators.

Keeping up with the technological advancements and having properly trained employees available is the challenge today for both management and the union. We feel that working together we are meeting this challenge and making possible our continued growth in this ever-changing technological age.

Thank you.

DR. WALSH: Thank you Mr. Stoicoiu for that very clear way in which you set forth management's concern in this training area.

At this time I will call on Mr. Eldridge, one of my former colleagues in the U.S. Department of Labor, to give us our government's point of view in the area of apprenticeship and training.

MR. ELDRIDGE: Thank you, Jack. Delegates, it is really indeed a pleasure for BAT, the Bureau of Apprenticeship and Training, and more specifically, myself, to have this opportunity of appearing before you. This, as I see it, is an opportunity for exchange. The Bureau of Apprenticeship and Training has followed the activities of CINTERFOR very closely since its birth and has submitted materials to and has worked with many of you as individuals. We welcome this association.

In my portion of the program concerning "Factors that influence training patterns in the United States," I am going to draw a picture of the evolution of apprenticeship and its influence on current training patterns in the United States. I am doing this because I think there are many influences which we have experienced which are also working in the development of your training patterns.

Apprenticeship in the United States has a rather long history dating back to its founding fathers, but the promotion of a National Apprenticeship Program did not begin until the 1930's, a mere generation ago.

Until the 1920's, the great majority of skilled workers came from abroad, as Jack has already mentioned, principally from western Europe and England; but with the curtailment of immigration following World War I, the need for training skilled workers was brought into sharp focus. The previous source was no longer available - yet the need for more skilled workers increased.

A long look at the manner in which training was being accomplished in the United States was vitally necessary. What was seen was not very encouraging. Most of those who acquired skills did so through their own devices, that is, by watching skilled men perform their duties and by getting some verbal instruction from experienced men. This in itself, of course, was the basic kernel of training, but was a far cry from a planned approach to a problem which was becoming critical.

Industry, in general, displayed little interest in a formalized approach to training. The open market was the place to obtain the men they needed with the skills required. Some industries did provide training, hoping that through this they could build up a sense of loyalty to the organization and retain workers.

The stopping of the flow of skilled works through the Immigration Act coupled with the tremendous industrial expansion, technical development and mass production, combined to increase the need for a more realistic approach to training and a definitive national program.

No longer was it sufficient to expose a worker to skills and hope that he would be able to absorb them. A new approach to training was needed. The prospective trainee needed an educational background on which to build his skill as he made the transition from apprentice to journeyman.

National employer and labor organizations, educators and officials at all levels began to give serious thought to the problem of shortage of skilled workers in our expanding economy.

Efforts to promote apprenticeship on a national basis were not successful until the 1930's. Curiously enough, it was from the National Recovery Act during our great depression that the National Apprenticeship Program received its greatest boost and gained its greatest success.

In the National Recovery Act, codes of fair competition were established by industry. These included a minimum wage, a forty-hour work week, extra pay for hours worked over 40, etc. Most of these codes provided an exemption from the minimum wage for learners but not for apprentices. Since this would have meant that apprenticeship was being put out of business, a Federal committee was formed to resolve the situation. This committee adopted the principle that the labor aspects of apprenticeship were functions of the Department of Labor. An Executive Order was then issued authorizing the Secretary of Labor to establish standards for employment of apprentices and to set up an organizational structure to grant wage exemptions.

A decision was made to do this through state apprenticeship training committees to get a close as possible to the local level. This initiated the principle of approval and of a continuing operational responsibility at the Federal level.

It was pointed out to the committee by employees and employers that industry and labor were being brought together by this Federal Committee on Apprenticeship in a most effective manner to work out and administer apprenticeship programs.

In addition to this, young people were being assisted in training which fitted them for profitable employment and for responsible citizenship.

As the time was ripe for apprenticeship legislation, Congressman William Fitzgerald of Connecticut, a former moulder by trade, sponsored the bill which now bears his name - The Fitzgerald Act or The National Apprenticeship Act. It passed both of our Houses without opposition and was signed by President Roosevelt on August 16, 1937.

Now there was an Apprenticeship Act, but much remained to be done to create an effective National Apprenticeship Program.

The purpose of this National Apprenticeship Act was to focus attention on the creation of a two-phase program: on-the-job training supplemented by theoretical instruction which pertained to the trade involved.

The Secretary of Labor appointed six people as members of the Federal Committee on Apprenticeship, representing labor, management, and government. The functions of this Committee were to formulate labor standards necessary to safeguard the welfare of apprentices and to promote their acceptance and adoption.

To accomplish this, a labor-management committee was named to draft suggested state labor legislation. Numerous labor and management groups gave strong support to this, which established the principle of joint participation and responsibility.

The National Apprenticeship Act also created a service within the Department of Labor which since 1956 has been known as the Bureau of Apprenticeship and Training. Since its inception the Bureau has been active in both apprenticeship and in skill improvement.

The Bureau itself does not conduct training programs but works with management and organized labor groups in the development of such programs. It is entirely the prerogative and the responsibility of management and labor to determine apprenticeship needs in their specific industries, to decide on the types of training, to select those to be hired as apprentices, and to administer these programs.

More than 9,000 joint management and labor apprenticeship committees are in existence today, with the majority in the construction trades.

The Federal Committee on Apprenticeship, which is the Policy Advisory Committee to the Secretary of Labor, sets the standards of apprenticeship and the policies and procedures under which the National Apprenticeship Program operates. National Joint Apprenticeship and Training Committees, which represented labor and management, formulate and adopt national apprenticeship and training standards for specific trades. At the heart of the apprenticeship programs are the local joint apprenticeship and training committees which have jurisdiction over the actual operation of local apprenticeship programs.

Apprenticeship is not and cannot remain static. It must keep up with technological changes in the various trades and add programs for new skills which become necessary to the country's economic well-being.

Apprenticeship, as it exists today in the United States, has a built-in flexibility which enables it to expand, contract or modify as changes in technology occur.

From the first day of indenture, the apprentice is exposed to the tools of his chosen trade as they exist at that time. He associates with journeymen who through the years have absorbed not only the basics of their trade, but who have always been active in keeping current with changes, improvements and innovations; in his study of the technical aspects of his trades, he is under the supervision of a craftsman.

This, then, is the apprenticeship system as it exists in the United States.

This is our NATIONAL APPRENTICESHIP PROGRAM.

Thank you.

DR. WALSH: Thank you Mr. Eldridge for that expose of our apprenticeship programs.

My colleagues of the CINTERFOR reunion, might I take but a few brief moments to summarize the highlights of our presentations this afternoon, and then move on into a discussion period.

You will recall that we had presentations made from the point of view of public vocational education, from the industrial training side and from the Government in the promotion of apprenticeship and training.

We took all of the elements into consideration. We have found that there were some differences noted. We heard of the great development of public vocational schools that stemmed from the fact that, while we had a tremendous expansion of education in our country, it was felt that much of that educational development was in support of general education and preparation for entry into the higher educational realm. The feeling existed that there was little being done to prepare individuals to enter into productive employment.

With Federal, State and local support this led to the development of public vocational educational programs that were geared to prepare people for the specific occupations that needed to be filled in the labor market. We heard of the expansion of that program until today it is providing such training to a much larger segment of that population.

We were made aware of the fact that in the United States public education is a responsibility of the state and that the Federal Government moves as a stimulator, as an innovator and a developer, but it is the responsibility of the state through their local communities to mount the educational programs.

We next heard from Mr. Stoicoiu, that industry has a continuing concern for the generation of manpower that has the capabilities to move on into the private sector and to perform in response to the manpower needs of the industry.

Even though there has been a great expansion in the field of vocational education in the schools, many of the people that are available for employment come to that employment without the capabilities to perform. In effect, he is saying that many of our young people who go through our general educational systems exit from it without any specific skills or knowledges that can be applied directly and immediately at the work place.

You will recall that in Dr. Ginzberg's presentation this morning he made reference to the fact that we have moved away from preparation for some of the practical jobs that exist into preparation in its broadest sense, to be able to cope with a multitude of problems.

Mr. Stoicoiu is telling us that industry has to take the practical approach and say that its people must be able to perform in order to help the individual company to become competitive in a private enterprise system.

Therefore, industry itself has a great concern for the development of its people, not only working with employees at the plant site in developing their skills and competencies, but also in making linkages with training centers and giving some direction to the development of specific programs to meet the individual needs of that employer.

We talked about the system of apprenticeship in this nation. Mr. Eldridge laid out for us the pattern that puts the United States Department of Labor in a promotional position, not in the position of a trainer, but as a stimulator in working with representatives of management and organized labor in bringing them together in forming of joint apprenticeship and training committees. They guide the designing, planning and organization of an apprenticeship program within the industry that combines not only the development of skills through the association with the skilled craftsman, but also the development of technical knowledge that is used to supplement the knowhow with the know why.

We could go on and on and discuss other elements of the programs in both public vocational education, in industry, or through apprenticeship, but I think we have already laid the groundwork for a series of questions that you wish to raise at this time. I think it would be most productive for us if we now engaged in that disucssion.

In order to get the discussion underway, I have already received a series of questions from some of our colleagues who are participating in the session, and if I might, I will read them and direct them to one of the individuals for a response.

The first question is directed to Mr. Stoicoiu, and it reads like this:

"If all education and training should be geared to the needs of the employers and industry, is there a concomitant responsibility of business and industry to provide meaningful and remunerative jobs for all people who receive training and education?"

"In other words, if industry sets the pattern and people train or go through educational programs to prepare for them, is there a responsibility on the part of business and industry to provide remunerative jobs for those people?"

MR. STOICOIU: Business and industry is ready to accept this challenge of providing jobs. I would like to qualify this question and my previous statement a little. If you have in your area a company that is growing, a large electronics company, doesn't it follow that schools should produce young boys and even young women coming out trained in electronics so that this company can employ them and grow? Throughout the United States you can pick up any newspaper, and there are a number of advertisements for secretaries. In this morning's Cleveland paper I counted approximately 25 different companies that were advertising for secretaries. Yet the Cleveland school system turns out approximately 3000 girls every year. Whey don't we have more secretaries than we need?

It follows that the two must come together. Education and jobs must come together, and they must be tailored to your specific area wherever the area may be. When they come together we may provide the jobs, take these people, then train them further, upgrade them and thereby create jobs for others in the area. We can then grow and not have any problems of giving employment to people who need it.

DR. WALSH: Very good, sir. We have another question here from Mr. Romero of Peru, and he directs it to the chairman.

"Why is the vocational education branch of the American Education Association not represented in the seminar?"

First of all, Mr. Romero, the makeup of the American Education Association is such that it tends to disregard participation of American vocational educators. Therefore, there has been established in the United States the American Vocational Association which represents the points of view of public vocational education in all of its aspects.

The American Vocational Association representative will be here tomorrow. He is Mr. Lowell Burkett, the Executive Director of the American Vocational Association, who will speak for that group.

I might add also that we do have at the conference representatives of the United States Office of Education which represents the promotional and leadership side of vocational education. Dr. Beaumont, representing that group, is here with us today.

I have a few more questions here in Spanish. One of them is directed to Mr. Eldridge. "Is it possible that information on the National Apprenticeship Act and any of its modifications could be made available to this group? Could they be made available in Spanish?"

Secondly, the question was raised as to whether or not it may be possible for AID to provide a Spanish interpretation of the benefits of apprenticeship and their influence on meeting manpower needs in this country.

MR. ELDRIDGE: I do not have with me the material requested, but I can furnish materials to the directors. However, I must apologize, it will be in English. Unfortunately, the Bureau of Apprenticeship and Training does not have money budgeted which would permit its translation.

We are only too happy to make this material available, and if there are other means for translating it, you have our full approval of using it in whatever manner needed.

I do not quite understand the second question.

DR. WALSH: I think the question has to do with whether or not there is any kind of documentation available that would indicate what effect the Apprenticeship Act has had in helping to meet the need for manpower in this country.

MR. ELDRIDGE: To answer this question broadly for the group, I would have to say that there is no material available for presentation.

It is not because we are withholding it. It is because our sources of information, statistics, are not sufficiently organized for us to furnish this type of statistical information.

However, on an individual request addressed to the Bureau of Apprenticeship and Training, we will be only too happy to pull together specialized information which may answer individual questions. These could be addressed to the Bureau in Washington to my attention, and I can assure you that immediate response will be forthcoming.

MR. WALSH: Thank you, Mr. Eldridge. I would agree with the individual who generated that question that it would be most appropriate for a paper to be prepared that would indicate the outputs, if you please, of the national system of apprenticeship in generating the kind of skilled manpower that we need to flesh out our work force.

I think it would be good for our own people in this nation to see the same kind of information spelled out.

Mr. Furtado of Brazil raises a question that I think we should direct first to Mr. Eldridge, and I would take the liberty of the chair in calling upon another member in the audience, who is going to participate in the program later on in these days, Mr. Taylor, representing one of our international unions.

The question is asked: "Is it true that the unions may have the trend of limiting the number of apprentices in order to keep salaries and wages at a high level?"

MR. TAYLOR: Well, Jack, you just lost one good friend.

Seriously, gentlemen, the question would be one difficult to answer. Let me first qualify the statement by saying that, yes, quite frankly, local labor management rules do control the number of apprentices in the industry, particularly in the electric industry.

This is not determined at a national level. As has been mentioned throughout the meetings here today, we have local joint labor management rules to control the influx of apprentices for a given area. We strongly urge and have been urging for over 20 years that these groups try to use some criteria that will enable them to predict their future needs.

When you take a young man into apprenticeship, you are not training him for today or tomorrow, but at the very least, he will be a journeyman four years from now. You have to think ahead, consider the construction within the area projected in the future, the number of retirements, the number of deaths, the number of people leaving the trade to go to some other job.

All of these factors need to be considered, and these are what we try to have our local committees use as a reasonable basis for determining the number of apprentices needed in the future.

We are one of the very few industries in the nation at the moment that has a surplus of applicants for apprenticeship.

Many of the trades have a shortage, but we in the electrical industry are fortunate enough to have a very substantial number of qualified young men for every job opportunity that arises.

MR. WALSH: Thank you, Mr. Taylor. Mr. Furtado, does that answer your question?

MR. FURTADO: Yes.

MR. WALSH: I have another question from Mr. Schlesinger of the Ministerio de Trabajo of Guatemala, which I will hold for a little later in the program.

Now, may we have any additional questions from the floor? We will come back to your question, Mr. Schlesinger.

MR. BAQUERO: I may go into a controversial issue, and even so, I am going to ask your indulgence.

This question is addressed to Mr. Eldridge.

You mentioned that vocational education as such started in the United States in 1930. However, the A & M Colleges, or land grant colleges, have provided the United States with skilled training programs for over 100 years.

Is your statement, therefore, a technicality or, indeed, is vocational education different from what the land grant colleges have been contributing to the growth of the nation for a long time?

MR. WALSH: Might I answer that question? And then we will come back over if Mr. Eldrige wants to come aboard, because I think he will.

First of all, you are absolutely correct that vocational education programs had an early beginning in the land grant colleges under the Morrill Act legislation back in the 1800's, but primarily in the area of generation of agricultural and mechanical skills that eventually led to what are now programs of engineering.

However, there were beginnings in vocational education in the public schools and the schools of this nation much earlier than the period that Mr. Eldridge referred to of 1930. He was referring to the establishment of programs of apprenticeship at that time if I read him correctly. He was not referring to what would be institutional or school programs for the training of skilled workers. We had development of these in the early 1900's and the Federal Tort beginning in 1917 under the Smith-Hughes Act that supported vocational educational programs in the public schools.

You are absolutely correct in your historical review that there were early beginnings in the 1800's under the Land Grant Act in our colleges of mechanical and agricultural art.

He was referring specifically to industrial apprenticeship or apprenticeship in the building trade under employment, not in the school.

I have a question here from Mr. Bologna of SENAI in Brazil. He asks, "Is there some regulation of apprenticeship terms in the different trades as it relates to the vocational training of adults in the USA?"

Mr. Bologna, would you care to expand on this just a little bit?

Are you referring here to the combination of activities between the training that takes place on the job under the craftsman and some of the instruction that takes place in the school for the technical training? Would you clarify your question one bit, Mr. Bologna?

If I read your question correctly, Mr. Bologna, you are referring to the fact that under the National Apprenticeship Act there is a requirement that all apprentices who are in training under employment with employers must also participate in a minimum of 144 hours per year of related technical instruction.

This related technical instruction, for the most part, is carried on in vocational schools throughout the country, and Federal funds under the Federal Vocational Act are made available to assist in the payment of the salaries of the instructors who would teach that related instruction.

Is that responsive to your question, sir?

Here you see that even though under the National Apprenticeship Act, we do have organized apprenticeship that is guided and directed by joint apprenticeship and training committees made up of labor and management. There is a third link that goes back to the school, which accepts the fact that there are some parts of the training involved in technical instruction and related instruction that can best be done in classroom.

In the state of Minnesota, for example, the apprenticeship organizations of the building trades have determined that all apprentices must attend school a minimum of one half day per week. In one of the neighboring states, they require one day per week. That means that the apprentice who is on the job during the major part of the week, working with the tools of the trade, under the instruction of the craftsman, must return to the classroom for related technical instruction.

In my school we employ instructors to carry on that kind of work during the day. The apprentice is away from the job for half a day and comes to the school for related technical instruction.

In the case of electrical workers in the IBEW, they go beyond what was once their initial training before entering into an apprenticeship, moving on into the study and application of electronics in their work.

This is one way of building skills to a higher level. For example, before an apprentice is taken into the IBEW apprenticeship, he must have completed a vocational training school program and in my city it is stated that he has to have completed a two-year preliminary program at the Dunwoody Institute. He receives credit against his apprenticeship, but even so he comes back to that Institute to continue his related technical knowledge that moves him up and abreast of the times. We know that our workers are no longer just wiremen or controllers working with controls. They are now getting into what some people refer to as the application of little black boxes that are electronic controlled. They must understand all of the new and advanced techniques so we combine the school with the on-the-job learning in apprenticeship.

DR. REESE: I might add one thing, gentlemen, that you are in a city at the moment in which the requirement has been established by the industry for one day of apprenticeship related instruction per week, and I am certain that the Max Hayes Vocational School would welcome visits of any of you if you can make it to see the equipment, classrooms and laboratories primarily established for apprenticeship.

Dr. Walsh has mentioned the technical aspect. In most trades there are certain skills that are extremely infrequently used on the job and, therefore, difficult for the apprentice to learn on the job. The school also attempts to provide this training under the direction of qualified craftsmen. This provides opportunities to develop certain kinds of skills that an apprentice would not be assigned in a production situation.

Thank you.

DR. WALSH: For our next question, the chair recognizes Dr. Palacios of that great training organization, INCE.

DR. PALACIOS: Thank you. I would like to know how you determine the training needs of the present existing industry and of those businesses that will be created in the near future.

MR. WALSH: Very good. Would the Federal and local authorities make some determination in terms of the training needs of businesses and industries that they would serve.

I call on Dr. Reese for that answer.

DR. REESE: There are a variety of sources to assist communities in meeting these needs.

First are the manpower agencies in the area on the state and community and sometimes national level.

One of the best sources is joint advisory or representative advisory committees in each of the skilled fields.

A major objective of committees composed of workers and employers is to keep the program geared to today's and future requirements. If a major change is to come in a year or two years in a particular field, the industry sees it coming. They bring this to the attention of the schools and, frequently, but I will have to admit not frequently enough, we find the school taking the leadership with the help of their industrial co-workers actually equipping themselves to retrain personnel from the industry.

We would like to see this every place.

MR. WALSH: I might add a bit to Dr. Reese's response to indicate that great concern has been shown in our country in terms of the establishment of new vocational schools regarding what courses they should offer, how to go about selecting them.

The Vocational Education Act of 1963 directed that greater liaison be established between the local employment service, that in a sense receives calls from industry in terms of what their needs are for employees, and the vocational education authorities, who are planning new programs.

In the new amendment to the Vocational Education Act for 1968, there is an expansion of the Act which places it as a requirement and says before a new course can be established in the vocational school, there must be a determination of need made by the employment service that if training is given in this field, there will be jobs available for those who are trained.

Under the Manpower Development and Training Act that was passed in 1962 and that has been continually modified and improved, this same concept holds.

While the Manpower Development and Training Act was originally developed to provide for the retraining of workers who were displaced as a result of the advances in technology, automation and the like, there was a provision that before Federal funds could be used to support the development of a program and pay the expenses of that program, this determination of job availability must be made.

Once this determination is made, the vocational educational authorities are requested to set up the program for it.

Coupled with this are the vocational advisory committees in conjunction with each of the courses that are operated in our vocational schools.

Recently, I had the pleasure of addressing a banquet of the vocational advisory committees of one of our large vocational schools on the east coast.

This school has an enrollment of some 15,000 people in its program over the years, operating a multitude of courses. At that banquet we had some 275 people representing all phases of labor and management, people who had a great concern for what happened in those programs.

That is how I would expect that it could be in your country. Since employers are contributing funds through payroll tax deductions, they should have a great concern and must stay close to the program to be sure that they are geared properly.

We have a question here that comes from Mr. Dannemann. He refers to it this way.

Mr. Stoicoiu said that vocational training must be oriented to the economic needs of commerce and industry and he asks whether this concept would be valid in undeveloped countries. He asks further, "In these countries, shouldn't vocational training have a broader social standing?"

Here the question is not merely the commerical and industrial development but the social progress.

Vocational training as an educational force should not be used only as an instrument of the private economy.

How do you respond to that?

MR. STOICOIU: There is not any question that the vocational training must be oriented to the economic needs and at the same time a broader social base for the less-developed countries.

I think it starts at a lower level. I am familiar with a bolt and nut plant in Sao Paulo. We started off working with some people who had never been in a plant situation before. They were started on the packing operations and in some of the semi-skilled areas then moved up over a period of time into the skilled and more advanced operation of the faster industry.

As these people develop, I think they develop a sense of being a part of the business community and tying it together in the social aspects as they begin to move up, even into supervisory jobs. As the people in the less-developed countries move up into these higher levels of management, the social strata and status come along with them.

MR. WALSH: Might I add a bit to that, Mr. Dannemann.

In my country for a long period of time, the theory of social responsibility was neglected by the private sector. The concern was one of securing the workers needed to flesh out the work force and to a degree they even engaged in piracy, of trying to secure workers from other employers with incentives of increased pay and the like. This period has now pretty well gone by. We are now in a period of rather touchy labor supply from the point of view of those who can and will work within the labor force in a productive manner.

We find that in this partnership between the Federal Government and the private sector there is a combination of efforts whereby Federal funds are being made available to employers to the degree that they do accept some social responsibility in working with the less advantaged workers. They will provide job opportunities and training not only in the skills that are needed to keep production lines moving, but also in the skills that will help those people relate to the other workers on the job--communications skills that are necessary in the world of work today, those employability skills that help them to respond properly to supervisors and to administrators, to be at work on time and to produce a full day's work for a full day's pay.

Under the direction of Henry Ford, II, of the Ford Motor Company, a National Alliance of Businessmen has been established where representatives of major corporations in this country agreed (1) that they have a social responsibility; and (2) that they will participate by making jobs available and will engage in training activities to help those who have been disadvantaged and shut out from the work force find their way into it.

These are some of the things Mr. Stoicoiu was talking about earlier in terms of programs, that his company is engaged in, that have some of this social responsibility tied in with them.

I agree with your concept that we should have this broad, social concern as part of our concern in the training realm.

Next question, please.

Mr. Pontual, of Brazil.

MR. PONTUAL: Thank you. It has been stated factually today that national institutes in Latin America should broaden their activities to meet the full aptitudes of industrial education.

It has also been stated that training is not only a responsibility of national institutes, but also of local institutions.

In the United States, as we know, business takes care of a good part of training and educational responsibility, and in Brazil we have some good examples of private business taking care of that and also utilizing, in some instances, the full capacity of the services of national institutions.

This is an important option for countries in full development as well as the countries of Latin America. Either they will develop and expand their national institutions or they will support and motiviate private business to take care of some of these training responsibilities.

The question is probably directed to Mr. Stoicoiu. The question is: "Are there records, may be with the American Society for Training and Development, showing that private business in the United States is taking care of (1) manpower needs outside institutions, I mean, manpower not taken care of by institutions; and (2) manpower retraining in accordance with technological change?"

MR. STOICOIU: First of all, let me take the first part of your question of where the institutions are not providing the manpower training.

Industry has had to pick this up, either on its own or working with private training institutes, of which we have some very good ones in this area.

If we do not, we cannot get secretaries and others properly trained. We are now training our own or we make arrangements with a private training concern, or work with some special area school to make this available. It is very difficult.

We make a multiple spindle automatic bar machine, for example, which might be called the Cadillac of the machine tool industry. If you are going to Max Hayes Vocational School, there are four machines like this at that school. This is the only school in the midwest area that has this equipment available. We are working with the school to train boys on these machines so that when they come out, those companies in this area that have this equipment can then get some men at least partially trained on it. Wherever this is possible, where the job is not being done by the institution, industry is picking up a lot of it.

Retraining has become a way of life in industry today. Because of the changes of equipment and especially of the work force, we are regearing our approaches to how we are handling it.

For example, if we are hiring young men coming into a job at the lowest level and they want to upgrade themselves, we make available training in blueprint reading, measuring instruments, and so on to help them build above the minimum job scale.

At the same time we are training our president and vice presidents and all of our top people on the impact of the computer and its effects. The range depends on the industry, but the range is great.

Larger companies can do it more easily. General Motors, for example, has their own school in which they train their own engineers, and they have a tremendous program.

I have never seen an advertisement in any paper for anybody to work at General Motors, because they are so large that they develop and train all their own people.

In fact, their philosophy is: for every job they are training three replacements. I mean they have three people available.

In a small company with 40 or 50 people this is not possible. We are assisting the smaller companies to do this kind of thing. There are companies that are banding together in the various associations. Almost all of our industries have associations. They band together and provide special training, retraining, updating or whatever the needs are. Where the institutions are not doing it we are picking it up in most of the areas.

MR. PONTUAL: Perhaps I may ask a second question which is related to this one. Are there indications that the similarity of retraining among most of the companies are such that when they do the retraining, they are cooperating in a sort of pool in order to permit these trainees to be given back on a national basis. I mean one company retrains one man. If this man quits, or if he is fired, can he be absorbed by another company easily, without having to be retrained in a similar activity?

MR. STOICOIU: Yes, this has happened. And this is a drawback in a sense. I can site an example of where 8 or 10 companies, small companies, send men for training on our equipment. They compared notes on wages, etc., and before the training program was completed, some of them moved on to the other companies that were paying a little higher wage.

Their employability in many of the areas is not a problem. The problem is that you may lose them if you are not quite as high in wages or fringe benefits as some of the other companies

MR. PONTUAL: Thank you very much.

MR. WALSH: Might I add one point for Mr. Pontual. There has been a commission established in the United States to make a study of the contribution of the private sector in the training arena. It may well be that Mr. Kunze may refer to this in his presentation tomorrow, because he has been an active participant in that activity.

The report of that commission and its study has now been prepared and should be released shortly. It could well be that that might provide you with some of the answers to the questions you are raising, in terms of the degree in which companies are providing this kind of training.

Under the Manpower Development Training Act, there has been a funding of consortia of companies who joined together in providing training opportunities for a group who may eventually go a multitude of ways through the participating companies.

If you are interested in the degree of that development, I would refer you to some of the activities in Japan where considerable work is being done in consortium of industries within occupational groups in supporting training programs of this type.

I have a question from Mr. Schlesinger, if it is not the same one that you have given me the description on; I am saving that until last. Is this another question?

MR. SCHLESINGER: Yes.

MR. WALSH: Go ahead, sir.

MR. SCHLESINGER: I am going to make this question in English, so you can get it directly.

On the supposition of reduced financial means of official institutions to solve very large and pressing needs, are we justified in establishing, at this stage, a selective system of admission to training in accelerated courses, including agriculture, aimed at obtaining immediate favorable progress?

In other words, do we at first lay stress in obtaining short-range immediate economic results rather than achieving long-range broad social objectives? If that is so, do we use tests which are fairly easy to apply in industry and commerce but rather more difficult in the first sector of agriculture? What would be the test in agriculture?

MR. WALSH: Let me see if I interpret your question, and then we will find out who would like to try to answer it.

Your question is that, if we look at institutions that have considerable resources behind them, what is the role in the quasi-public sector in organizing programs, and should they be aimed at short-range immediate impact programs, or should they be geared in the direction to look for social improvement in the long range?

MR. SCHLESINGER: My question, may I?

MR. WALSH: Yes.

MR. SCHLESINGER: My question has a shorter range. Do we select the participants for the course or do we elect everybody?

DR. REESE: Our most successful vocational schools establish with industry in each instance the requirements (physical, mental and others) that are needed in this particular occupation. I can see agriculture being no different than any of the technologies or skilled trades.

A flagrant example of no selection would be the person who was color blind being placed in an electronics class. This gives the illustration how we need minimum requirements or standards for admittance. Our successful schools have this.

Our successful schoools, in addition to having standards for admission to each of the different types of the occupations, have available a variety of cirricula so that the individual who is not qualified for the admission to one area of instruction might be assisted in selecting another.

I do not know if I have answered this or not, but we do, and there is a strong growth throughout the country to give more attention to selection.

Perhaps one of the weaknesses to our public vocational education system in past years has been the tendency to establish the same criteria for admittance to that school regardless of what occupational field the individual was going into.

This might be a qualification of previous education, such as algebra or geometry which might be apropos to a particular occupational field, but not to the others. In their efforts to screen workers, vocational education has not been any different than industrial employment offices who often set up hypothetical goals or levels which may have no validity whatsoever in certain kinds of work.

MR. SCHLESINGER: May I ask a question? I was worried about the agricultural sector, because many of the people to be trained do not know how to read and write.

MR. WALSH: So your concern here is one that has to do with education in the rural sector in terms of how far do we go. I am aware of the pyramid of education in many of the countries–your concern is how far do you take education for all of the rural population to help them be better communicators in reading and the like, in order to avail themselves to some of the materials that are being made available through demonstration centers, to improve the agricultural economy.

Anyone wish to comment in that area? How about some of the colleagues in the organization? Anyone want to make response to Mr. Schlesinger in that area?

MR. SCHLESINGER: May I?

MR. WALSH: Yes.

MR. SCHLESINGER: Of course, that is so and I am fully aware of that. But the practical problem in a country like Guatemala, in the rural sector or the first sector of agriculture, is precisely that. The admission tests in schools are fairly easy. But what are the admission test for short accelerated courses? That is the question.

When the man does not know how to read, and he must be taught his trade and his work, even before he is taught to read. I hope there is nobody from UNESCO here.

That is the problem. Do we stress the point on the actual training before we reach them to read? That is another question besides the first one.

MR. WALSH: It is a very good question.

Of course, it poses problems in how the instructors are able to deal with the problem where we have a reading deficiency. It may well be that what needs to be generated in this area is a program in basic education for people in the rural areas, the agricultural areas, that aims at the development of reading skills using reading materials that are geared to the agricultural areas.

We have found in many of the courses that have been offered in this country for our most disadvantaged people that we are able to teach reading and more effectively by taking the words that are used in the instruction from the field in which they are interested.

We have found many new approaches to the teaching of reading and writing in dealing with our most disadvantaged people–approaches that have resulted in the improvement of grade level competence in reading of one grade per month by using materials that are drawn from the sector itself.

I would assume that we have no expert on our panel here that feels able to cope with that question in any greater depth. However, I would make the statement that you may want to talk with the representative of our United States Office of Education, Mr. Beaumont, who will be working with you tomorrow in terms of what has been done in that organization in the generation of materials for people who fall in this category. They have done some work in that area.

All right, shall we move on to the next question? Who would like to raise the next question in the group?

The gentleman from El Salvador.

MR. MARTINEZ: I would like to know if the apprentices in the United States receive a salary during the period when they are receiving the technical instruction relating to the trade they are learning in that industry. And if they do receive a salary, who pays that salary?

MR. WALSH: Do we have the question?

MR. ELDRIDGE: As I understand it, the question was, under an apprenticeship program, the apprentice receives a wage. Does he receive pay for the period in which he is undergoing related training? Am I right?

MR. MARTINEZ: Yes.

MR. ELDRIDGE: I will have to answer that question generally first and then be a little more specific.

Under the majority of apprentice programs, the apprentice is paid for 8 hours a day of work, 40 hours a week. Therefore, in his related training, which is gained after work hours, he does not receive pay for this period.

However, the related training is part of the apprenticeship, but he gains this at his own expense, so to speak.

Now, there are exceptions. The exceptions primarily lie in the larger companies such as General Electric where the related training is given to them during the regular work period. Instead of working on the job 8 hours, they may work on the job 7 1/2 hours and receive one-half hour of related training, but their wage would cover the full 8-hour period.

There is some tendency to move in the direction of payment, but again this basically is in the larger companies.

DR. REESE: Here in Cleveland there is a good example of one of these situations. The individual apprentice goes to the vocational school, one 8 hour day, during the working week. So he is paid, in Cleveland, for 8 hours, one-fifth of a week's work, while attending the school.

DR. WALSH: Yes.

MR. MCARTHUR: Could I find out whether the apprentice is paid the same rate, or is it at a reduced rate?

DR. WALSH: It is a graduated scale, and I will call on Mr. Eldridge to respond to this.

MR. ELDRIDGE: Under the National Apprenticeship Program, the wage scale of apprentices generally is set upon a graduated percentage of the journeyman scale. We can say roughly that an apprentice enters apprenticeship in his first year in the neighborhood of 45 to 50 percent of the journeyman scale and periodically receives raises if he develops satisfactorily over a four-year program.

Normally, the increase would be approximately 5 percent every six months. It is not automatic. The boy has to prove his skill development to the satisfaction of the joint committee. At the end of his apprenticeship period, he will step into the journeyman scale.

MR. WALSH: Any further questions? That being the case, we have one last question here that comes from Mr. Schlesinger, and in order to respond to this I would ask Mr. Carvalho of CINTERFOR to join me—we have another question? All right, we will hold this off just a minute. One more question back here from Colombia.

MR. ECHEVERRI: I would like to ask if the guide to the textbooks for technical education is prepared by the government, if the government gives an outline for the preparation, or if any business is free to try to prepare these books.

A second question related to the first is, what is the length of the training of the apprenticeship programs? What is the duration?

MR. WALSH: Let me see if I can attempt to answer the first question for you. We may return to one of our colleagues for the second. The question has to do with whether or not, in terms of technical school programs, the national government sets the curricula—and I might broaden that to come to the point of whether in terms of apprenticeship programs the national government tends to provide the outline of the course.

The answer would be this way: In terms of programs in the vocational and technical schools, there are a number of guidelines that are prepared by the United States Office of Education in a broad general way. These guidelines, in effect, have been generated for the most part in the technical field, the technology. It says these are the general areas that should be covered. However, as Dr. Reese has indicated, the responsibility for the operation of the schools and the setting of the curriculum is the responsibility of the state.

In many instances then, using some of the Federal guidelines, state education departments may provide guidelines for curricula in their schools. But in the long run it comes down to the local community that is supporting the school and the staff who are working in conjunction with advisory committees who will organize the material and outline the courses that will be offered.

Similarly, in order to support this kind of operation, many of the state educational agencies have developed curriculum laboratories that produce brochures and documents that will give these kinds of guidelines and even supply textual material that can be used in the instructional program.

Now, on the apprentice side, the Federal Bureau of Apprenticeship and Training, working under its National Apprenticeship Committee, working again with representatives of industry, does set standards for the instructional program.

Would you take a moment to talk about that, Mr. Eldridge?

MR. ELDRIDGE: As I mentioned in my discussion, the apprenticeship program has generated national standards of apprenticeship. These standards have been formulated by a national committee, brought together with labor and management representatives; and because these people are from industry, they are the ones that know what the job requires, the standards then have come from industry itself.

We attempt to bring to these committees ideas that we have gathered from other trades which may help them develop better standards, but the standards are so developed that they include the various steps that are necessary for a boy to go through in order to qualify for the skilled trade. This is the approach of the Bureau of Apprenticeship and Training.

We do not train, ourselves; it is the stimulation, the promotion, the bringing together with this common thought in mind, that training is industry's responsibility. Industry is the one that can do it. The Federal Government cannot.

MR. WALSH: To avoid taking away from the time for the reception and that which is to follow, as we move toward the dinner hour, I will take an action here that says, this is the last question.

This question has been prepared by Mr. Schlesinger of Guatemala as directed to CINTERFOR. He said, "I would like to ask CINTERFOR, or any of the distinguished delegates from the Spanish-speaking countries, to provide CDPI of Guatemala with information on teaching machines and instructional programs in Spanish or audio-visual methods in terms of slides and films in Spanish that have to do with learning on the three levels of workman, supervisors and commanding supervisors."

So I am going to turn this over to Mr. Carvalho, because, as I remember, in the organization of CINTERFOR, one of the charges had to do with the documentation and development of materials that could be distributed. He might want to lead a little discussion with the delegates of the various countries in terms of what is being developed and what is available for distribution among the member countries.

Mr. Carvalho.

MR. CARVALHO: Thank you.

The available information about the various teaching methods and the machines which are used for this purpose has been brought to the knowledge of the various training institutions by means of the regular publications of CINTERFOR, by documentation.

Our catalogs, our bibliographical catalogs, and our bibliographical data, which we have distributed among the delegates here present, will furnish them with data about the publications which deal with the teaching problems or with instructional methods of programmed instruction.

We have not, up to now, reached the point where we could gather all of the audio-visual material that has been produced in Latin America and other areas.

Regarding programmed instruction, I think that the only institution in Latin America that has had experience and that could serve as a foundation for the consideration of this method, whether it can be applied on a large scale or in limited programs, is the National Institute for Cooperative Education in Venezuela.

MR. SCHLESINGER: The year before last there was programmed instruction from ILO, and it was very successful. This opened our eyes to the possibility of mass use, provided we find the Spanish text.

MR. WALSH: Dr. Palacios.

DR. PALACIOS: About three years ago we began work in the field of programmed instruction with the cooperation of AID, to be exact. It is difficult for us to use foreign texts indiscriminately. Foreign texts of programmed instructions could be inefficient foundations for local texts, because this efficiency depends on the circumstances prevailing in the occupation and these vary greatly from one country to the other.

Programmed instruction is particularly useful as an additional instrument for theoretical formation or related training–to apprenticeship, particularly if it is linked to correspondence training. In these ways we can cover more or wider sectors of our population.

For example, at this particular time in Venezuela, we are training all of the electorial officers, voting officials who are going to take part in the next elections, through a system of programmed correspondence instruction prepared by the Institute in cooperation with the Electoral Supreme Council.

I am mentioning this to illustrate the application or versatility of these methods, but I must insist that is is not always advisable to translate texts or to take texts that have been developed elsewhere.

It is necessary for training people to be trained within a country so they can prepare the text according to their own circumstances and conditions.

MR. WALSH: Thank you, Dr. Palacios.

Gentlemen, we will conclude our afternoon session. I want to thank specifically our participants in the panel, Mr. Stoicoiu, Dr. Reese, Mr. Eldridge, for their willingness to be here with you today, and to their employers for making it possible for them to be here.

I would like to thank you as participants and colleagues for your attention and your own participation in the question and answer period.

Again, I would restate my own personal pleasure in being here with you, my colleagues in vocational training from Latin America. I think it has been most constructive and most worthwhile.

I have taken the liberty of placing before you a copy of the bulletin of the Dunwoody Industrial Institute so you could see what happens in the private sector of vocational education schools in this country.

If any of you have an interest in visiting Dunwoody in Minneapolis, Minnesota, not too far from here, we would be most happy to welcome you and to show you our operation and our activity.

Thank you so much for your participation. At this time I will turn the meeting back to my colleague, Dr. McVoy.

DR. MCVOY: Thank you, Dr. Walsh, and we will make no extra charge for that little commercial announcement about the Dunwood Institute.

Now, we have just a few announcements before we close today's program.

(At 5:30 o'clock p.m. the meeting was adjourned.)

PROCEEDINGS

September 10, 1968

MR. MCVOY: This morning I would like to introduce to you the Deputy Assistant Secretary for International Affairs, Department of Labor, Mr. Darwin Bell. Many of you know him, because he spent many years in Latin America.

I would like for him to say a word of greeting to you.

MR. BELL: As everyone has done, I want to extend the greetings on your arrival here in the United States. It's a great pleasure to see so many Latin American friends here. I've spent a good deal of time in Latin America and feel very much at home among my brother Americans. I look forward to this conference with you and hope that together we can accomplish the purposes for which we have gathered.

I'd like to bring you greetings from the Secretary of Labor, and particularly George Weaver, my boss the Assistant Secretary, who asked me to tell you all hello. I think many of you know Mr. Weaver. He has been in the international game for some years now. Mr. Weaver, at the moment, is in Tokyo conducting a conference of the OEDA.

Greetings, and let's get on with the show. Thank you, very much.

MR. MCVOY: Mr. Karl R. Kunze is Manager of Training and Management Personnel Department, Lockheed, California Company. He's a member of the President's Task Force on Occupational Training in Industry, President of the California State National Vocational Guidance Association, Administrative Vice-President, Opportunities and Industrialization Center, Chief Instructor, Administrative Leadership Course, University of Southern California, Instructor of Industrial Relations Center, California.

That's only a few of the things he's doing now. I'll not go into his background.

Mr. Kunze, it's a great pleasure to have you.

MR. KUNZE: Thank you Mr. Chairman, delegates and guests. Even though I am duplicating the words of others, as a spokesman for industry, I want to welcome you to the United States and to say that I hope that your visit here will be enjoyable and fruitful.

Many of us in industry have been closely connected in one way or another with the industries of Central and South America. A few years ago, I visited the Mexican Productivity Center, Cuernavaca, and discussed there the motivation of employees and also management development. I found that I gained much from the exchange of ideas during the few days that I was there and feel that both the presenters and the audience will gain from this well-planned seminar.

Our topic this morning will be "How our Training Systems Work." This places us unequivocally into the present. Previous speakers yesterday have given you background and history concerning vocational education and training. They have given you the *when* and the *why* of these fields, and we're going to zero in on the *what* and the *how*. That is, what our training systems are and how they work.

The title, "How Our Training Systems Work," is, in my opinion, somewhat biased because some of our training systems are not working, especially our larger, what we call macro systems, involving government, industry, and educational institutions. However, our multi-institutional efforts are relatively new, and we are benefiting from such experiences, and we want to share some of these experiences with you this morning.

The pace of science and technology is so great that science fiction writers are trying desperately to keep up with it. We hear that the world knowledge is more than doubling every ten years, and we hear that scientists, engineers and even technicians get out of date within one year if they drop communication with their field. The training profession is receiving the impact of many forces which, in the aggregate, place great demands on a relatively new profession.

The skill level of the present labor market is so low that nearly every new hire, every new person hired by a business or industry, requires some training. Training departments are being called upon to train people in areas that they have never trained in before. There are many changes in industrial technology. For example, factory and office automation, computerization, miniaturization, high reliability requirements of our new products, new materials, processes and methods all call for expertise of the training man.

Education, on which the training professions depend for their basic principle and methodologies, lags behind the progress of the science and even, in my opinion, the social fields. This places the training person at a disadvantage.

We will discuss some of the problems that are being encountered and some of the possible solutions. Certainly, research and development is one of these solutions. The American Society for Training and Development has made a step in the right direction by instituting training research projects about two years ago.

Some of the research and demonstration projects of the Manpower Development and Training Act are applicable to industrial training projects. The universities are conducting relevant research, most of which has not as yet fallen into the hands of training people. Later, we will call upon Dr. Horowitz to tell us of some special research projects in which he is involved.

Organized labor has done much to raise the skill level of our work force. Modern unions are conducting self-initiated training programs, co-sponsoring apprenticeship programs, and are working hand in hand with industry to make training more effective. Mr. Taylor, on our panel, will reveal some of the important efforts of organized labor.

As we heard yesterday, since 1961 the Federal Government has played a more energetic role in the design and administration of training programs. Mr. Beaumont will cover this for us.

I would like to say that the procedure to be followed this morning will be similar to that of yesterday afternoon. I will introduce all of our panelists, they will make their presentations and, if it is an appropriate time, we'll have a coffee break. After that, I will summarize their comments, and we'll have a question and answer period.

I would hope that you would prepare your questions at the time that you have them. Write them down so that you don't forget them, so that we may have a meaningful, worthwhile question and answer period.

First, to my extreme left, is a man with a comprehensive background of business, education and vocational education. Mr. John Beaumont is now Chief of the Service Branch, Division of Vocational and Technical Education, Bureau of Adult Vocational and Library Programs, Office of Education. He was formerly Director of Vocational and Technical Education, the Board of Vocational Education and Rehabilitation for the State of Illinois. He has held many Government posts. He has a background of teaching. He was a teacher-educator and an instructor. Of interest to me is that he was past president of the Illinois Vocational Association. He has his master's degree from the University of Minnesota, which is an unusual university. It not only has high scholarship ratings, it also has a good football team. Rarely do we have universities in the United States with both, good football teams and high scholastic standings.

Our next presenter also is not a single discipline person in any sense of the term. He's an educator, a vocational guidance authority and a union official. I'm referring to Joseph Taylor, who is to my left.

Mr. Taylor served an apprenticeship as an electrician and worked at the trade for approximately ten years. He also served in the United States Navy during World War II as an electrician's mate. For his first job in Washington, D.C., he was Director of Apprenticeship for the Associated General Contractors of America. He's a member of the American Society for Training and Development and served on the American Vocational Association National Advisory Committee on Trade and Industrial Education. He is now a representative of the International Brotherhood of Electrical Workers in Washington.

Dr. Morris Horowitz, to your left, brings to this panel a rich background in labor economics, education, law and research. He's Professor of Economics and Chairman of the Department at Northeastern University, one of the finer universities on the east coast. He received his bachelor's degree at New York University and his Ph.D. at Harvard University, which is a university with high scholastic standing, but a very poor football team.

Dr. Horowitz was a Program Specialist in Manpower in Argentina for the Ford Foundation. And perhaps you know of his work as an ad hoc manpower consultant to the Pan American Union and Agency for International Development. He represents education in world affairs here with us today.

So let's go to our program. Our first speaker is Mr. Beaumont. He will discuss Government's contribution to training in the United States.

MR. BEAUMONT: Mr Chairman, delegates to the seminar. I appreciate greatly this opportunity of meeting with you this morning.

When Dr. McVoy called me and asked me to participate, I was delighted, and I have found the seminar most informative and interesting.

I was assigned the topic of the "Working of the System in Relation to Education."

To me, there are probably two assumptions in this title. One is that the system works, and the second is that there is a system.

There would be those who would challenge the statement that this system works, but to me it's something like a story I enjoy about the apple. If you pick up an apple and happen to pick it up and look at it, if it has a perfect red surface, you think you've picked up a perfect apple; but should you turn the apple in your hand and there was evidence of the work of a worm in the apple, it becomes a rotten apple. So which is it, a perfect apple, or a rotten apple? It's somewhat both, and that's what this system is.

And is there a system? Well, I hope that during my discussion with you I can indicate that there is a system.

However, I am sure that many in this audience could challenge any generalization that I might make to you and find exception to those generalizations.

This is a system in which literally thousands of individuals have some decisionmaking activity. It is not a system in which one, two, three, or a few even, are in the position of decision making.

There were five questions posed, and I was asked to talk about three different governmental agencies, so really I could have prepared 15 separate papers but there isn't that time, I'm sure.

Briefly, I will try to give you some idea of the Federal agency or agencies, the role of the state agency or agencies, and the role of the community or local agencies.

There are at the present time three different major Federal agencies that are involved in training and education.

One is the Department of Health, Education and Welfare, which administers the Vocational Technical Education Program and the Vocational Rehabilitation Program.

There is the Department of Labor, which jointly with the Department of Health, Education and Welfare, administers the Manpower Development and Training Program.

There is a third agency, the Office of Economic Opportunity, which has a series of programs in training.

The total appropriation for these three agencies in these particular areas was approximately $2,150,000,000 for 1967.

Now, how does this work?

Well, basically Congress sets in motion the activities through what are known primarily as authorization acts. These authorize the activities and authorize a maximum funding for each activity.

It is up to the Executive Branch to administer these authorizations and, after appropriations are made, to fund the various acts.

The extent of the money from the Federal Government is quite extensive and yet, basically, it is what you might call "seed" money or encouragement money for the most part, because it is expected that the states and the local agencies will, in turn, assist in the funding of these activities.

For instance, in the Vocational and Technical Education Program, of which I am a part, it required that the states and/or local agencies match each dollar of Federal money.

At the present time, the Federal money in that particular activity is only about 20 percent of the total expenditures.

There are two or three major things that happen at the Federal level. There is a tendency on the part of the Congress to encourage what appears to be a national priority or national need. At the present time, one of the greatest national needs and with the greatest emphasis, is that of the disadvantaged or those who have not been able to enter the mainstream of the work force in this country. Considerable emphasis is being placed upon training for these particular individuals.

There is also emphasis on the technical and health occupations due to a lack of manpower in these particular areas, particularly of the para or sub-professional personnel in the health field.

In order to bring to the state agencies an understanding of what is intended, of how to approach these problems, the Federal agencies provide a wide range of consulting work.

They also fund considerable work in research. The Federal agency itself does not do the research, but it funds the research through educational institutions, private institutions, foundations, and all kinds of non-profit agencies.

They also accumulate information and statistics and attempt to put them in focus so the states and local communities can use them effectively.

It also does a great deal in relating and emphasizing the updating of training technology through the development of curriculum materials in the technical areas. We have been working in curriculum materials in the "laser" technology, numerical control, oceanography and other areas which are not widespread in their adaptation but are growing areas of opportunity in this nation.

There are also studies involving manpower needs and how best to fill the manpower needs of the nation through education.

Much of this is done through advisory groups from various segments of our nation, business, industry, government, professions, universities and others.

Let us move quickly to the state agency, if I may.

The state agency in this nation is really the legal authority for education and has the legal powers to move education. This is delegated to the state by the fact that it is not specified in the Constitution. In a republic, the states retain all authority that is not delegated in the Constitution to the Federal Government.

And yet, in many, state education has always occupied a peculiar position of its own. The governor is in control of practically every activity, but he is not totally in control of education.

For instance, the directors of welfare, highways and most other activities are a part of his staff, but the head of education in a state is frequently an elected official. This puts education in a little different framework.

The vocational education in most states is under the control of a board which sets policy, employs a consultant staff, implements policy and evaluates programs in the local schools. It is in charge of teacher certification, it has some part in teacher education, curriculum development, in making plans for job requirement surveys and in some cases it operates schools, but this is not common.

In some cases, the state agency provides an extension teaching form of training, but again, this is not general.

The trends we see at the state level are toward more planning, more opportunities for all, including the disadvantaged and a greater development of what we call area vocational centers. These are attempts to bring several schools, maybe a half dozen, together into a group with a center to which they transport students for vocational training.

The trend is toward junior college development for technical training. These provide us the first opportunity in this nation for technical training at a level between secondary education and the university.

Junior colleges cover the 13th and 14th grade activities and enroll students who normally do not plan to complete a four-year degree course. They take work in various technical specializations and at the end of one or two years, leave the junior college and go into employment. In many cases they receive what is known as an associate degree for this particular activity.

The principal work of vocational education is conducted by the local agency which puts the larger share of the funds into this activity. State funds also go into the activity, but local agencies have always been the largest contributors.

The programs are under the direction of a board, usually elected by the local people and are very responsive to local needs. They provide the facilities, the equipment, employ the teachers, determine the curriculum. They, in fact, conduct the program of vocational education, the courses and occupational training that is given.

We see a trend toward what you might call occupational orientation, or a career-related curriculum.

Most of this work throughout the nation is done in comprehensive schools, but there is a tendency to make the total educational program what you might call more understandable in its objectives. A term that is being used a great deal in this country today is "relevancy." One of the problems of education is that it has not been relevant to the needs of the young people. There is now a tendency to relate even the academic discipline more to what the young people will be doing, whether they leave school and go on to the work force or continue in school.

There are more funds being devoted to vocational education, more emphasis on the disadvantaged and a greater use of what we call cooperative education. In this program a young person spends part of the week or part of the semester in school and part of the day or semester in a job related to his training. In this, he is integrating theory and practice, and we find this is a most effective way to conduct vocational education.

In summary, I would say the system does work in spite of differences. It is a system, even though it may be hard to understand the system because of its variances.

I brought with me three items—one is a report of the Federal Government on vocational education, which evaluates it; another is a copy of curriculum materials, which the Federal Government has recently prepared; and the third is a copy of a bulletin entitled "Progress in Public Education in the United States," which was prepared for the 31st International Conference on Public Education, UNESCO, in Geneva, in July of this year and which gives a broad picture of vocational education.

Thank you very much.

MR. KUNZE: Thank you, Mr. Beaumont. You have given us a very, very clear conception of the hierarchy of government and the interface of these various governments as they relate to vocational education and training.

You will notice in your program one item having to do with developing instructional material.

There are so many steps in the training process before one reaches the point of developing instructional material that I would prefer to discuss with you now what we call in industry, a systems approach to training.

I share the opinion of many training people that, if a work situation that may have training implications is examined thoroughly and if training is determined to be needed, then the development of instructional material becomes quite dependent upon the findings up to that point.

In other words, it is my opinion that certain steps must be taken before you determine what kinds of instructional material should be used.

We call this approach a systems or sequential approach in training.

If there is some evidence that training is needed for new employees, for upgrading or training people who are to remain in their occupations but who are not performing up to standard, then four major steps are involved, and I would like to show you these on this screen.

(See Charts–Annex III)

This is the systems approach to training. It is a uniform procedure for conceptualizing training problems.

The four broad faces are Program Analysis and Definition, Program Design, Presentation and Evaluation.

Let's talk about Program Analysis.

The first step of need determination involves studying analytically a work situation to find out whether training is required.

We ask: Is this situation the consequence of a malfunctioning of a person, a machine, or a process?

If it is something in which workers are involved, the next question must be: Is this condition the result of not enough supervision, too much supervision, the wrong people on the job or inadequate training?

If the situation is the result of inadequate training, and we know that some training is to take place, the next question is: Who is going to receive the training? and that is covered in the block entitled Audience Analysis.

Normally, the person who is deficient in skills or other requirements are the ones who are trained.

However, sometimes his immediate supervisor might be trained and the supervisor then pass on that training or information directly to the worker.

Next, we go to Definition of training program objectives.

Frequently the training objectives are not identical to need determination, since several programs may be necessary to meet a training need.

Training Program Content is really the substance of a training program, and it includes the subject matter.

Here we consider such things as how relevant is this subject matter.

Mr. Beaumont just referred to the emphasis on relevancy in teaching in the school system.

We have this same emphasis on relevancy of subject matter.

Also taken into consideration is how much theory should be provided and how much practice, how much subject matter, etc.

The next step has to do with identifying methods.

If skill changes are involved in the training, then demonstrations, cut-aways, diagrams, and practice sessions should be a part of the type of presentation.

If knowledge changes are to take place, reading in advance, lectures, discussions, group discussions and reference materials might be appropriate.

If attitudinal changes are desired, then free expression, group dynamics and personal needs consideration would be appropriate.

The next step has to do with logistics. We give this an important sounding name; and though many people don't consider it important, it is.

It covers such things as getting management to support a program and providing a climate for learning with comfortable seats, good seating arrangements, good lighting and so forth.

Finally, we have the Presentation which is just what the four of us are doing here today. And this should be the result of all of these steps which have been taken into consideration.

And then finally, the Evaluation.

Every new program should be evaluated for several reasons. Among these are: to find out whether the trainees are actually benefiting from the training, to measure the effectiveness of different kinds of instruction, the effectiveness of training aids and to learn of the value of a program for a trainer's edification and for management information.

There are many different ways of evaluating a program, depending upon the training concepts involved.

The results of program evaluation are fed back to the various steps of the system and corrections are made to improve the effectiveness of the program.

I have given you this little presentation partly to show you what can be done with a slide presentation.

These are some of the visual aids we use in our work. I know you people are using many of them.

The kind of instructional material we use depends on the cost, the time necessary for preparation, the versatility of the instructional material and its effectiveness.

I chose to discuss this because I know that many of you are in countries not having the funds you would like to put on the training program. We have found that we can cut costs immensely if we first study the need for training. Often we find that there is not a need for training but for something else that is less expensive. If we follow through these steps I have mentioned, we can produce training programs that, in some cases, are only half as long and half as expensive as they otherwise would be.

I think that you will find some benefit in considering this kind of approach in the design of your programs.

Mr. Joseph Taylor will now discuss with you organized labor's contribution to vocational education and training.

MR. TAYLOR: If you have not already gotten the message, this group has been needling me ever since yesterday afternoon, and they didn't quit all night last night, I might add.

Seriously, gentlemen, it's a real privilege to be here and have this opportunity to make known to you some of the work of the International Brotherhood of Electrical Workers, most of whose programs are conducted in cooperation with our employers.

I think it would be wise to start this presentation with a policy position with respect to our organization. It is a matter of policy that we very strongly recommend to all of our local unions when they are establishing a training activity, and if at all possible, that such activity be established jointly and cooperatively with the employer. Unfortunately, this is not always the case, but we do try very hard to do this. You might wonder what in the world a labor man is doing in training. Perhaps I can give you a pretty good idea of why we need to be involved by giving you an example of technological impact on another field that happened on the west coast of the United States. Many of you gentlemen are aware that this is quite a center of religious activity. There is one of every kind of religion you can possibly imagine, including Devil worship.

There was a young priest faced with this so-called "technological development." Having had rather substantial training and education, the young man began to put his training and his education to work and conducted a survey. You know you always conduct a survey first. In this survey, he determined that over 80 percent of his parishoners drove sport cars, so he took all of the pews out of the church and put in bucket seats.

Needless to say, the congregation picked up and things got interesting. He decided to carry this situation one step further. If they were as mobile as his survey would indicate, then perhaps something else would work, so he put in drive-in confessionals. When the Bishop heard about it, he sent a man down to check it out. The man came down and was quite impressed with this young priest's adaptations, particularly considering his competition. He went back and reported to the Bishop that he thought this was an outstanding development and he would encourage it.

But he said that he did find one thing wrong, and that was the neon sign. The Bishop said, "Neon sign? You didn't mention a neon sign." He said, "Oh, I did forget to tell you. There's a huge neon sign about 10 feet high right over the drive-in confessionals and it says, 'Toot and Tell, or Go to Hell'."

That is an example of how technology is affecting the area of religion, and you can guess how it might affect an electrical industry.

Seriously, our job is not as great in the field of training new workers as some of my predecessors here might have led you to believe.

We have long had an established apprenticeship training program, and it has been quite successful, although there are occasions where we have a shortage of manpower. This is not always true, but the work is seasonal, and manpower will vary over a period of time and over the years.

There has been and there is a continuing problem of trying to keep our people abreast of technological development and that has been my task.

The assignments given to me this morning for the presentation were on five subjects. The first one had to do with how we support legislation having to do with training.

It may come as some surprise to you gentlemen to learn that one of our major projects has been not so much supporting legislation on education as it is perhaps to oppose and modify certain aspects of some legislation to where we can live with it.

To give an example, some ten years ago an act was passed entitled the National Defense and Education Act. It happened to be amended on the floor of the Congress by a legislator, and a rather confusing paragraph read into it which resulted in confusion with respect to regulations coming from it.

Incidentally, any similarity between the law and the regulations interpreting the law is purely accidental.

The regulations came out to the effect that, for purposes of that act, the construction industry is not essential to national defense. That's a rather unusual statement. We have been wondering just who is going to launch all those missiles and build our manufacturing plants, should we ever get in a situation where we have a need for them in our national defense.

Many pieces of legislation we have not opposed or objected to any way. We have been fortunate in this nation, when vocational educational legislation is offered, there is usually very little opposition.

Oftentimes, we are called in to consult and work with people in preparation of such legislation. Among these are the American Vocational Association and the committee mentioned to you earlier, that I have had the privilege of serving on.

In the development of training personnel, we've only one major program. We have not done the job here as well as we would like to have done it. We need to conduct training activities and improve our instructors.

Though we have not achieved great success in that field, we have had very close cooperation and assistance from the Office of Education and the various local and state vocational education groups in providing training for our teachers.

The vast majority of teachers in our training activities are journeymen wiremen or journeymen electricians. We have tried college professors and engineers, but they just don't speak the same language. There is no way to get it down to practical language that will reach the man who is working with the tools. At least, this has been our experience.

We do have, and I will give each delegation a copy, our teacher's training course material. All of these were taken, more or less, from vocational education throughout the nation.

The instructor's guides for many of our courses of study contain a teacher training element.

In the development of instructional materials we would use about the same process as outlined by our chairman a few moments ago, but we use a little different personnel than he does. Almost without exception the training programs are developed by and for use in the electrical industry jointly with our employers.

A good example is our course in industrial atomic energy which is publicly available and has been ordered by quite a number of nations.

This is the primary text for the IBEW course in industrial atomic energy, its uses, hazards and controls. It is an orientation program designed so our workers can learn to work with this new-found source of energy and be able to protect themselves and those around them. It does pose some special problems, as radiation cannot be protected against by any of the conventional means.

This material was produced cooperatively by our local unions and the Atomic Energy Commission, the United States Office of Education, the Commonwealth Edison Company, the Detroit Edison Company, the Duquesne Light Company, the New England Power Service Company, the Northern State Power Company and the Yankee Atomic Electric Company.

These people, each with a balanced counterpart from labor, produced this course of study, the instructor's manual and the student workbook materials that go with it.

These materials will be on display outside where you can take a look at them. They can be ordered commercially from the Rider Publishing Company in the United States.

Some of the other training programs will also be on display.

Our course in industrial electronics was developed largely by a mechanic and, unlike much of your technical training programs, it was not developed along theoretical lines nearly as much as practical ones.

This material contains the instructional manual on how to install and maintain most industrial electronic control systems. We are not interested in training them to design them. That's already been done. But we must qualify people to maintain them and to operate them.

We have gone to a little extra work here, because we assumed the instructor was not a trained teacher. He is first of all a mechanic, and we try to do as much of his preparation work for him as possible.

So far, it has been quite successful.

One of the top scientists in the nation said recently that as late as 1950 the technology of this country tended to double at the rate of about each 20 to 25 years. The current estimated rate of doubling is 7½ years. When you stop and think of the knowledge required of a topnotch electrical mechanic with respect to radio isotopes, electronics, solid state devices and that sort of thing, changing at the rate they are changing, the potential for his continued training is quite great; in fact there is just no way for him to get out of it.

In an effort to make this available to greater numbers, we have instituted the IBEW Home Study Book.

This is a correspondence program. We did not develop this program ourselves. We simply picked up a very fine program that is commercially available and made it available to our people at substantial savings to them.

This information also will be out there.

The coordination of job requirements with manpower needs is difficult to achieve. As I implied to you, work in the electrical construction industry is seasonal and the term "journeyman" in itself poses its own problems. It implies that a craftsman trained in Cleveland, if the work is not in Cleveland, may wind up in Detroit, Los Angeles or Dallas, Texas. He goes where the work is.

By giving our people formulas, we try to arrive at some decision that makes sense with respect to numbers and fitting these people into the job opportunities that exist, but we are constantly faced with the problem of a desire to train more people than we have job opportunities.

There are people who would have us train great numbers. In our opinion, a rather horrible thing to do to a young man is to train him for a job and then not be able to make it available to him. He hates us all for having denied him the chance that he feels is his.

I have packets of materials here for each of you which contain data sheets, descriptive literature and information on most of our training activities and training programs.

Those of you who want further information or those who want additional copies, let me know and we will be very happy to make them available to you.

Thank you very, very much.

MR. KUNZE: Thank you, Mr. Taylor. I'm quite surprised to find I shared some of Mr. Taylor's biases. Whenever a management and a labor person get together and agree on something, it's quite a unique experience.

We next will hear from Dr. Horowitz, who has some very interesting research to reveal to you.

Dr. Horowtiz.

DR. HOROWITZ: As a university professor, I was given the job of talking about the role, importance and major contribution of research to manpower training and development in the United States. As an economist I'm concerned with slightly different kinds of problems than the problems discussed in the last hour or so before you at this session. I'm concerned with the overall view of public policy. I'm concerned because more and more am I aware that, not only in countries around the world where there are very difficult problems of shortages, but also in the United States, we know very little about how people acquire their skills. We have all kinds of statistics in the United States. We probably collect more statistics than any other country in the world, (and we do have some fairly reliable statistics on many things) but we really have no way of telling ourselves or anyone else how people acquire their skills. What are the training methods, the education, the paths of learning? And this becomes critical for an economist who is concerned about overall policy. We are interested in not only how, but what are the different training paths of skill acquisition. Once you know which training path turns out the best or the most efficient or the most able craftsman, (and also how long are these training paths and what are the costs involved) we have a good idea where the government should spend its money.

We in the United States also have rather limited resources for education and training. If the government, Federal, State or the local, is to finance the acquisition of the skills, should it put its money on apprenticeship programs, vocational high schools or subsidize private employers for formal, on-the-job training? Should we withdraw from this program and let people acquire their skills as they can based upon the needs of industry, and not get involved in specific programs of training people?

As a result of this interest, about three years ago I and some fellow economists on my staff undertook a pilot study in the Boston metropolitan area of tool and die makers. Tool and die making is a highly skilled and very critical occupation in the United States and in any other industrialized nation in the world. We interviewed in depth 400 tool and die makers in over 50 different companies in the area. From these interviews, we developed six more-or-less basic training paths. Much to our surprise, and that of many other people, apprenticeship in the tool and die maker's trade, that is apprenticeship without any previous vocational high school, accounted for only 15 percent of our sample. Those with vocational high school and apprenticeship were an additional 10 percent. About 25 percent of our total sample had apprenticeship programs of some sort in tool and die making.

Twenty-two percent learned their trade by on-the-job training, being taught specifically in some kind of formal program given by a private company. Twenty-two percent had vocational high school as their only formal training program, and an additional 11 percent had vocational high school plus on-the-job training. What surprised us even more was that about 15 percent picked up the trade without any kind of formalized training at all. There was an additional miscellaneous category of about 5 percent which had a wide mixture of different kinds of training and education.

We developed what we think are six basic paths of training and then interviewed workers, their foremen and their supervisors to try to determine whether any single path turned out the most able craftsmen. The thing that intrigued us most of all was that there was relatively little difference between these different paths. They all turned out a significant number of skilled craftsmen who were relatively able. When we asked the foremen why, the answer was, "If they weren't very able, we didn't keep them; we fired them." All those that were still on the job when we interviewed were relatively able. We could not conclude that any one training path was statistically better than the others in terms of producing more able skilled craftsmen. The differences were small, but vocational high school plus apprenticeship and vocational high school alone were the two highest paths.

The next thing we tried to determine was how long it took before a person was considered a highly skilled all-round craftsman. We asked these workers how long was it from the time they started training to the time they felt they were a highly skilled craftsman and could perform any type of work asked of you in the tool and die category. The average for the different paths ranged from 9 to 12 years, which is much longer than a straight apprenticeship program, a vocational school training program or on-the-job training program.

People in this trade felt that they were always learning, and a few old timers whom we interviewed said, "We're still learning." They had been doing the work for 30 years and performing very well. But every day they felt they learned something new. They still don't consider themselves highly skilled craftsmen.

One thing came through clearly in our research. If you are highly selective in permitting only those workers into a training program who have innate ability and motivation, you are likely to get a highly skilled craftsman, regardless of the training path by which he learns the trade.

The amount and the variety of work experience also is critical in terms of how good a worker he is 10, 15, 20 years after he starts learning. Another significant fact appeared to be that vocational counseling and guidance was exceedingly important to entering the trade. In those training paths, particularly apprenticeship, where the entrance requirements were more difficult, one had the feeling that the screening process was critical to the turning out of a highly skilled craftsman.

This study is not completed, but we have a preliminary report out, and some copies are available outside.

Let me make reference to another study which we recently completed in my university, a pilot study of paramedical occupations in the Boston area. We interviewed a few hundred workers in twenty different hospitals in sub-professional categories to find out how they acquired their training, what they were doing on the job and so on. We found that, in general, the workers were over-trained for the work they had to perform in the hospitals. They were required to take more courses and to spend more years in high school training and education than they were really required to perform on the job. Professional societies set up what appear to be rather arbitrary standards of licensing in order to maintain a high level of efficiency. One possible result seems to be a shortage of workers in the paramedical occupations.

This report has just come out. No copies are available here, but they will be available in the next few weeks through my office or through the Manpower Administration in Washington, to whom we submitted this report.

Let us summarize my comments. In the United States we know very little about how people acquire their skills. We know very little about which training paths are most efficient, better, cheaper and so on. It has become clear to us that considerably more research must be done if we are to make wise public decisions in this area of government assistance to education and training.

One basic question which was raised yesterday by Mr. Palacios and which I think is critical, is how do we know what kind of training to give? The answer, in my judgment, is we don't know what kind of training to give. We have vocational high schools, but the types of programs offered are frequently determined by the existing facilities, regardless of whether they are outmoded or not. And in many cases we have found that the programs are really not relevant to the world of work.

People go through specific vocational high school programs because they happen to be available, not because they have an interest in them; and then, when they finish, they often shift into a completely different field. The training they had in the high school was thus completely irrelevant.

The whole apprenticeship program in the United States is infinitesimal in terms of the total needs of training skilled craftsmen. We have programs that are registered through the government, the kind of programs talked about yesterday. However, there are as many programs that are not registered, given helter-skelter throughout the country. Nonetheless the number of persons turned out through apprenticeship is minute as compared to the needs we have in the United States.

Apparently, only in the private sector where individual companies have formal on-the-job training, does the training that is offered appear to be relevant to industry needs. In terms of public policy, we are still groping, but in terms of private industry, individual companies and industries judge their own needs and train people based upon these needs.

One other comment on vocational high school. In a number of states in the United States, vocational high school programs are dumping grounds for the students who are not quite good enough to make it through academic high school or through college. Under our state laws, students must stay in school to the age of sixteen or so. If they can't do well in a college preparatory program, they are dumped into a vocational program. They are there, not because they want to learn, but because they are obliged by law to stay in school.

Let me end by noting that there is a wide range of both formal and informal on-the-job programs which have been exceedingly successful in the United States. We know relatively little about how these programs are run; we have a wide range for further research. Perhaps in your countries you have similar problems. Clearly there is no need to take the same kind of approach we have taken here.

Thank you.

MR. KUNZE: Thank you, Morris.

MR. KUNZE: Ladies and gentlemen, we are ready to resume our session.

It's now my assignment to summarize the presentations of our panelists. As you recall, John Beaumont was the first to tell us of training. His subject had to deal with the hierarchies of the government and the interplay between the different levels of government. He told of the recent emphasis of the Federal Government on training the disadvantaged and on training in technical and critical occupations in health. He named the Federal

Government as the provider of funds, consultation, statistics and other national information. As I interpreted his comments, the role of the state is as the designer of vocational education and training programs and that of the local agencies the implementer of these programs.

He referred to trends toward occupational orientation, toward career related curriculum, to the tendency to relate academic content to everyday life and to occupations.

In his opinion, we do have a system and it is working quite well.

Joseph Taylor emphasized the necessities for joint labor-management policies as a foundation to programs and we all know of IBEW's long history in training its own people.

Joe mentioned that the IBEW has found it necessary to oppose Federal measures as well as to support them.

Dr. Walsh yesterday mentioned my membership on the President's Task Force on Occupational Training. There we had four management members, four union members, four members from the public and four from education. We had many differences of opinion but found there was a salutary end result of these differences. We found that the programs that we are now recommending to the Government are much more realistic than they would have been had there not been this disagreement.

I expect that during this discussion period there will be disagreement between our panel members. In fact, I hope that that will be the case, since there are no pat answers to any of these major problems.

Morris Horowitz described the role of research. He introduced his subject by saying that one of his major concerns is that of broad overall public policy in training and in education. He said that we also have limited funds, and a great question is where should the nation put its training money. We don't have enough money to put funds into all different kinds of training efforts. By implication here, there is a need to measure the effectiveness of training and to relate that effectiveness to cost. He described a developmental study of tool and die workers and stated that a small proportion of trainees received skills through bonified apprenticeship programs, but the majority of trained, skilled tool and dye workers learned their trade either through informal arrangements, through vocational schools, work experiences and even through hit-and-miss methods.

He mentioned six basic training paths and said that there is relatively little difference in the efficacy of these different paths. Workers felt that they had reached a state of competence in about 9 to 12 years, which gives us a good indication of the complexity of that field in the minds of the workers themselves. He expressed the opinion that vocational guidance is an important element in the initial selection of tool and die workers and that they would benefit much by vocational guidance at an early period of their development.

Morris deplored the practice of using vocational school as dumping grounds, using the schools for those that are failing academically, rather than selecting people positively on the basis of mechanical aptitudes and other talent necessary for vocational work.

Two points have emerged that I would like to have us pay special attention to. One has to do with the statement about unrealistically high standards. We find in industry, generally, there are unrealistically high employment standards which rule out the disadvantaged, the minority people who don't have the educational and the vocational skills.

Another important point had to do with bringing about relevancy of training matter. How can this be done? We know that in many instances our training programs are saturated with material that really isn't necessary for the kind of behavioral and skill change that we want in our trainee. What are some of the means for removing this irrelevancy from the training program?

We have some written questions here. Let me start with those.

The first one states as follows: "Your slide on types of instructional material listed simulators. Would you explain and give some examples of the application of simulators in industry?"

The Link trainer in aerospace was one of the first simulators. The Link trainer was a replica of a cockpit of an airplane. The pilot trainee could take a flight plan given to him, get into this simulator and fly his airplane all over the city without injuring himself. He was inside a simulator. The simulator actually rolled and tossed and made noises like an airplane so that the pilot could be conditioned to the actual work environment. This Link trainer was so successful that it is still in use.

We are now using computers to a great extent in simulation. Some of you may have heard of "business games." For example, we have one in which a business can be operated for five years through making decisions about the amount of capital that could be placed in the business, the product that is to be manufactured, the profit that is to be gained, the number of people in the work force, the extent to which training will be employed by that company.

Junior executives play this game for a full eight hours, usually on a Saturday. During an eight-hour period of making decisions, placing the decisions in the computer and then having the computer tell the trainee how he made out, our trainees are able to operate this business for five years. Sometimes they come out making the fantastic amount of $100,000,000. The last time I tried it, I lost $10,000,000 in eight hours.

In many cases, we use mock-ups as simulators. For example, we are now building a new air bus, which will have the capacity of 350 passengers and which will be flown by Eastern Airlines and some of the other airlines in 1972.

My job is to train people to put in the wiring, the plumbing, to attach the motors and to put the upholstery and trim into this airplane. One means by which we will do this is to create a mock-up of that airplane. It will be what we call a barrel section. Maybe it will be 15 or 18 feet long, and in it there will be seats and places for installing the necessary wiring and so forth. This is a type of a simulator.

The next question: "What is the structure of the labor movement in the United States? This question is asked because labor's contributions to training can be thoroughly different according to the particular structure of the labor market."

Joe, I wonder if you would react to that for us.

MR. TAYLOR: We have essentially two labor forces. Labor can be broken down in this country into two basic categories. One would be the so-called skilled trades, and another the so-called semi-skilled and unskilled trades. These are represented by two separate divisions of the organized labor group. We have the American Federation of Labor, which was the early group of skilled craftsmen, and the Congress of Industrial Organization, which has to do more with the semi-skilled but includes some of the skilled trades too. You are correct in assuming that they have different ideas, different material, different methods and techniques of approaching the subject of training.

I think you will find that the majority of skilled training, in the sense that we are talking about here today and in the past few days, is almost exclusively limited to the skill trade group or the old AFL group.

The CIO group does do some training, but most of it is what we call vestibule type of training. A person is brought in and trained for a relatively short period of time on a repetitive operation. He may be operating a drill press, he may be simply fitting a transistor into a socket or something of this nature. It is more or less a repetitive type of operation.

MR. KUNZE: This question is directed to Dr. Horowitz. "Which training path used by the tool and die makers you studied was the least costly to society? Did you make any cost benefit analysis in your study?"

Morris.

DR. HOROWITZ: We had high hopes when we undertook our tool and die study of being able to come out and say which training was the least costly to society, but we failed. We failed for a number of reasons. One was, the kinds of data that we could collect were not sufficient to permit us to set up a cost benefit analysis which would stand up under criticism. Secondly, we were under a time pressure, in terms of completing this study because of the costs involved, that would not allow us to spend the extra time, perhaps years, that would be necessary to even make an estimate on cost.

All concepts of cost and cost-benefit analysis are exceedingly difficult, particularly when the question is worded–and I think very cogently worded–was the least costly to society. The question then arises, what do you mean by society? If you said costly for the employer, it is a little easier to measure. What is the cost to an individual who is being trained? Again, this is easier to measure. When you talk about the cost to society, it is an exceedingly difficult thing, it is the concept itself that is exceedingly difficult. For example, what loss to society is there when a worker who is being trained stops his co-worker from working for a half hour and asks him to explain the operation of a machine? This is a loss in production by the co-worker, not by the trainee. This is a cost to the employer, but it is also a cost to the society in terms of a loss of production.

What about the income stream that the person who is being trained does not obtain while he is being trained? The fact that we asked young people to stay in high school until the age of sixteen or seventeen is a loss to society in terms of cost. Again, how do you measure these costs?

You have the other side of the coin. What are the benefits, in terms of this cost-benefit approach, that you are going to try to put a dollar value on? Again, it's extremely difficult. We are not giving up hope on this matter. We are still doing more exploration, but so far we have not been able to arrive at any cost figure that would be meaningful. I think that the only thing that we have that gives us some clue is the length of the training time, and this is related to cost but not completely so.

MR. KUNZE: Here is another one, and I would like to have John Beaumont to answer this.

"What methods are used in teacher training?"

Now, there is no reference to what kind of teacher training we are talking about. Obviously, there are many different kinds of instructors and teachers, but I wonder, John, would you discuss this for us.

MR. BEAUMONT: Well, in training the vocational teachers, we use the universities of this nation to a great extent. The universities are sometimes used in preparing teachers in subject matter. In other cases the subject is learned on the job, but the universities are widely used in preparing teachers in methodology of teaching.

In vocational industrial education, where much of the substance is learned on the job, we certify teachers without degrees and without high school education and, in some cases, without complete elementary school education. We certify them on the basis of their trade experience plus training in methodology in how to present the substance of their particular field to a group which they are instructing.

In some of the technical areas such as marketing, office training, health, etc., more of the substance is taught in the universities. Another area where we are teaching a great deal of subject content is the junior colleges. For instance, a general technician–it may be very difficult in a dental or engineering school to train a technician–but in a junior college he is trained as a dental technician, an electronics technician or other. We are finding that this advanced study of the junior colleges is providing us with a great deal of substance in the training of teachers in this nation.

And the state departments of education have had a major role in teacher training. They give a great deal of what we call short course, in-service teacher training. In practically every state you would have found, during the past summer, teachers brought together for a week, two weeks', three weeks' short training program to improve their skills in training.

I hope that answers your question.

MR. KUNZE: Mr. Taylor mentioned the importance of instructor training and the difficulty of finding people qualified to do the training, especially people qualified to do the instructor training.

As John has mentioned, the universities have done an excellent job in this area. Obviously, they should be doing a good job. They are supposed to be educators and to know this field very thoroughly.

The instructors in my department come from all walks of life. You know there is really no career ladder or no career pathway to the job of training instructor. Most professional people have some kind of a career pathway, the doctors, the lawyers and even teachers in the universities, but what about an industrial trainer? We have some who have come up the academic route, who have associate of arts degree, bachelors or even masters degrees. In fact, we have two with Ph.D. degrees doing research in executive development. However, we have others who were initially extremely skilled technicians and came right out of the plant. Some of these men had less than high school educations when they came to us. There seems to be one common denominator of all of my training people, that is that they have a tremendous confidence in training, and they are always taking all kinds of courses. If you'll look through the personnel folders of the 70 instructors that I have, you will find that some of them have taken 25 or 30 different courses to keep themselves up to date and to increase their own versatility.

We use the University of California at Los Angeles for our instructor training. We send our new men to a 60 hour program where they get practice in skills communications, both verbal and written, in human relations and in a sensitivity program that brings people very closely together, so that they can understand one another and deal effectively with one another. They have a session on the laws of learning, which is basic to all education, and they have sessions on the arrangements and logicalness in the preparation of subject matter. Before they do any instructing for us, they must prepare course material and attend courses of senior instructors to see how a senior instructor behaves in his role. They also make a presentation without any audiences, we call that a dry run, in front of a closed circuit television set. As soon as the instructor has finished his assignment, he turns back the T.V., sees himself and he can then analyze his successes and failures. This is a very complex kind of analysis, but we feel that, after going through all of these steps, an instructor is in a position to attempt to teach others.

Do we have some others? Here is one.

Mr. Taylor, I would like to have you respond to this one regarding training techniques. "Do you have in the United States a system of rotation or shifting of craftsmen so that they will upgrade their skills and keep themselves up to date with new methods and thus allowing them to move up in their job category or to be promoted?"

MR. TAYLOR: This is a very astute question.

Yes, we do have a rotation system. To give you an example, in the construction industry, there is a proviso in the local standards of apprenticeship that this young man will work for you six months or a year, then he will be rotated to another employer who does a different type of work. In my home community, for example, we have a man who does almost entirely power plant construction work.

We take young men and put them with him for a period of six months to a year. We move them next to someone that does primarily residential work, then to someone that does primarily commercial and industrial work. We try to rotate these young men in their four years of apprenticeship so that they will have a wide variety of experience and training background. After he graduates, he gets into the training programs you saw me demonstrate today—industrial electronics, industrial computer controls, atomic energy and that sort of thing.

Does that answer the question?

MR. KUNZE: I would like to add that, in my opinion, not enough rotational training is being conducted in industry today. It is quite expensive because a person, when he moves to another assignment, must take up time of the supervisor or of a training specialist. A lot of companies are prone to keep a man in a job, especially if he is performing successfully. They don't want to lose a good man.

I would say that in industry there is more rotation at management levels. Almost all of your major industries have programs of rotating young management people from one department to another and from one functional branch to another.

For example, from industrial relations to engineers, from engineering to manufacturing, or from manufacturing to finance. I think that there should be much more rotational training of the hourly workers, the factory workers.

Of course, that is one advantage of an apprentice, isn't it. The apprenticeship program is designed for rotation and requires rotation.

I have a question for Dr. Horowitz. I am referring to your research with tool and die machine operators. You mentioned the on-the-job training given by factories and said it was informal training, but almost all industries have training systems. Some even have their own factory schools. How do you classify this type of training?

Dr. Horowitz.

DR. HOROWITZ: Perhaps I was not too clear this morning when I indicated that on-the-job training can be classified as formal or informal. Many of the programs sponsored by individual companies can be formal plans with a regular instructor and may be for a specific duration of time with classroom instructions, on-the-job, or in the plant.

This is not true in many, many of the smaller tool and die companies which we visited. A small company with 20, 50 or 100 employees would not necessarily have a formal training program. They might have a foreman teach the person or spend a little time each morning for a few mornings a week with some of the trainees.

In terms of our study, we classify training as on-the-job training if it arranges for specific instruction in the shop by company personnel, even though it had no scheduled content or predetermined length. That is, if someone in the company was responsible for showing the person or giving him some instruction, even though there was not specific content or any specific or predetermined length of training, this is considered on-the-job training. In some cases, this is a very formal program. Some of our bigger companies like General Electric might have a very formal training program for its workers. Some of the smaller tool and die shops we visited didn't have any such program. They depended upon the foreman or a coworker to help the person in terms of training.

In contrast, we defined apprenticeship as following a predetermined schedule. It has a fixed duration of at least two years and included related classroom instruction. This is the basic difference that we try to make between apprenticeship and on-the-job training.

There are many, many cases in our interviews where it was just borderline. These were programs which were company run, not registered with the Bureau of Apprenticeship and Training in Washington or in the State Apprenticeship Service, but had sufficient amounts of formality so that it looked like an apprenticeship program. Yet, by our definition, they were questionable. The on-the-job training can be both formal and informal.

If, as we found in some cases, a person had informal training, but there was no one in the company that had the responsibility for showing him what to do or giving him any instruction, then we consider that training as "picking up the trade." He did it on his own. He watched another worker, asked the worker some questions and perhaps his coworker showed him what to do when there was a question.

This was not considered on-the-job training; it was "picking up the trade."

May I make one other comment about this rotation question which was raised a few moments ago. In our experience, we found that in the bigger shops, where there was a wide range of different kinds of work to be done, companies did make a point of rotating wherever possible. The smaller shops many times had the feeling this was too costly an operation. Where a young person, who was training to be a tool and die maker, was successfully performing certain tasks, it became too expensive to rotate him around. The needs of that particular company might have been very narrow, and they had no incentive to have him perform different kinds of work.

Even in some tool and die operations of big companies where the tool and die work was of a limited character, apprentices in regular, registered apprenticeship programs would find themselves in this same company for four years doing a very limited kind of apprenticeship program. Another apprentice might be in a different company and get a much broader experience.

One of the things that we are still exploring is the whole concept of the breadth of training. A person could have a great deal of training on a very narrowly defined operation and can perform that narrow operation very, very well, but he doesn't have the breadth that a good tool and die maker should be able to perform. This is where we try to differentiate between broad training on the one side and narrow training on the other.

MR. KUNZE: I would like to see if we can't get some kind of disagreement up here at the table. I think it was you who mentioned the matter of unrealistically high standards for occupations. I know that industry is often at fault in insisting that a person have a high school education to do a simple job as a tool crib attendant, for example, but the unions also are at fault. On the west coast the unions have not permitted MDTA programs for autobody work, because autobody work is a part of the automotive apprenticeship program.

Many of the repair stations in that locality use specialists in autobody work, in the electrical system of the automobile and others where skills can be acquired in one year or maybe two. Still, we have the unions insisting that that is part of a four-year program, and they are the ones who have to approve MDTA programs.

They are at fault, and in many instances management is at fault. I wonder if we could get Mr. Taylor to make a comment or two in this regard.

MR. TAYLOR: I have tried to be nice to this gentleman for most of this period of time here, but it is obvious that that has come to an end.

With respect to MDTA, I am awfully happy he picked up that one particular item, because we dislike the term very, very much, but not for the reason that he implied. We think that it has done an outstanding job in many areas, particularly in our manufacturing branch of industry where a quick vestibule type training program is needed, and you can do an effective job. Where it interferes with a long standing, operating program of apprenticeship, we have been opposed to it.

But the major opposition that we have to MDTA, gentlemen, was not with respect to how it operated but rather the legislation behind it. The law specifies that the determination of who is to be trained is the decision of the Department of Labor through the United States Employment Office. We still think labor and management have something to do with who is to be trained.

The determination of what curriculum is to be used is the perogative of the United States Office of Health, Education and Welfare, through the Department of Training and Industrial Education. We still think that labor and management know a little bit more about what is required to make a topnotch craftsman than do some of our—pardon the expression—"eggheads" in Washington. No disrespect to this gentleman over here, because he is one of our colleagues that knows us and knows how to work with us.

I think that he will admit that there are some misinformed and uninformed people in Washington.

The other aspect of the law that obviously would be opposed by labor is that the determination of who has successfully completed the program and where they are to be employed is the perogative of the United States Employment Service. I think the implication is quite clear.

That is why we oppose MDTA.

MR. HOROWITZ: I have asked the chairman if I too can chime in on this question of high standards. Of course, if you use the term high standards, clearly no one can be opposed to high standards. This is like saying how can anyone be opposed to having a high level of income. It is good.

The only question becomes, is something too high for the needs, or does it become too expensive in terms of society?

I think this is the kind of measure we have. While our chairman put it in terms of industry and labor, may I make one admission here in front of this group, that the criticism is even getting into the university levels, I'm sorry to say.

Some of you may be aware that in the United States there is now a growing shortage of people teaching at the university level. One of the reasons why there is a shortage is that we arbitrarily imposed high standards, that we insist that people have a Ph.D. degree before they can teach. Again, this may be considered an arbitrary level, arbitrary requirement, which really is not necessary in order to teach at a university level.

I won't debate this question, because I am in the embarrassing situation of imposing this same requirement on people I hire for my own faculty. This is not only true in the universities, it is true in many many areas throughout our economies. I think what has hurt us most in terms of our social consciousness in recent years is the fact that we know that there are people, disadvantaged people in the labor market, looking for jobs or are theoretically available for work. Yet, because two, three or four years back they might have dropped out of school, they don't get jobs. They knock on the door of an employer and say, "I understand you are looking for a sweeper." He says, "Sweeper? Yes. Do you have a high school education?" He says, "No." He says, "I'm sorry, I only hire high school graduates."

You ask the employers, "Why do you need a high school education for a sweeper?" He says, "Well, a high school graduate indicates the person has a certain amount of perseverance; he has managed to be able to sit through four years of boredom in a classroom, and this indicates the ability to do something. Plus the fact, we never can tell, we may want to promote him up to be president of the company." This is always a possibility in terms of the United States fiction that—"you too as a sweeper can marry the boss's daughter and become the president of the company"—and shouldn't you have a high school education at least?

I'm making the case too extreme, I realize, but this is just for fun. We do, in many cases, arbitrarily set high standards, too high standards for the needs of industry. This is true when we arbitrarily say, "Everyone ought to have a high school education." Or we unions may say, "Everyone who is an apprentice should have four years of apprenticeship."

This may be true in the electrical workers union. I don't claim to know enough about it so that I can argue the case, but having seen people paint the outside of my house with premixed colors of paint, and you tell me that the person needs four years of apprenticeship after four years of high school to become a painter of a house, I have some doubts. I just don't believe it. You have these different extremes.

Employers do it, unions do it, and I'm sorry to say that universities also do it.

Now, I have here a question that the chairman gave me, which is: "How do you in the United States coordinate job needs with human resource needs, and are there statistics on the matter?"

"Explain how the coordination is made and how it works."

Well, the answer is that we do not really coordinate. We have no overall plan for coordinating job needs with human resource needs. It is done on a market basis, on a price-market basis. A competitive group of people, employers of both the public and private sectors, when they need workers, advertise or they make their needs felt in the labor market.

Prospective workers at the age of 14, 15, 16, are told by their parents, or find out through osmosis, or reading that there are needs for tool and die makers, electricians, painters or college professors. Somehow they move around in the labor market in such a fashion so that at some point in the future the labor market, needs are met by the supply, and the market is satisfied.

We don't have a planned economy, and we have found that our operation perhaps has some defects. We are wasteful to a certain degree. Sometimes we train too many college professors and not enough electricians, and that is because college professors do not realize they can make more money by becoming electricians.

But you see, we don't know enough about this thing, and as a result we have "mistraining." We train too many college professors and not enough electricians, or we train not enough doctors and too many lawyers. While this is a defect in our economic system, we continue it because it does give the individual the kind of free choice which we in the United States value much more highly than having a mechanism which would maintain equality of supply and demand at all times. We value the individualized freedoms much more highly than the plan itself.

MR. KUNZE: I want to compliment Morris on his closing statement.

I was bothered yesterday and today that we have been talking about how you relate people to manpower demands in the country. Yesterday, somebody in the afternoon session asked whether industry was interested in social aspects of our population, but up to now nobody has mentioned the individual right to career self-determination. That is part of the American way of life, and I am talking about all of the Americas. It is our firm conviction here in the United States that a person should be given a free choice.

Obviously, he needs counseling, he needs help. It is not possible for a person with one arm, for example, to play a violin, there are certain limitations. However, the counseling profession is becoming more and more important, because we must make sure that individuals are given that freedom of choice.

One criticism I have of MDTA is that they had a lot of funds back in 1962 and 1963 that they had to dispose of, so they set up many kinds of vestibule training programs throughout the country. Placement people and the employment services dispatched people into the programs simply to fill up the classes, without giving consideration to the individual's interests, desires in life, or regard to whether that job would be challenging or satisfying to them from the standpoint of their own aspirations. I think that we must keep these in consideration.

Mr. Palacios wants to put a question to us.

MR. PALACIOS: Thank you. This question perhaps will not be answered in the few minutes that we have this morning, but perhaps it could be answered tomorrow. From all the presentations of yesterday and those of today, it is clear to see the responsibility taken by the private industries in the field of manpower training. I understand that there are special programs where the Federal Government has all responsibility, of course, with the cooperation of private industry. This is the program oriented to the youth, what we call marginal youth, to dropouts, to those who have abandoned school and are unemployed today.

I understand that during 1964 and 1965 the Youth Corps Act was passed and the Neighborhood Corps, I do not remember the exact name, but I believe large allotments of money were assigned to develop programs for the unemployed youth.

For us from Latin America, for those of us who are facing this population problem and the lack of employment for these groups, it would be very important to obtain some information during the course of this seminar about these programs oriented to this marginal group of the population, and the evaluation that you have made of those programs.

MR. KUNZE: Let me see if I can do justice to your question. During the last two days, there have been many comments about industry's responsibility in the training of those it gets from the work force. It is my understanding that a few years ago, I believe in 1964, 1965, the Federal Government embarked upon a wide scale program for the training of the disadvantaged through or under the auspices of the Neighborhood Youth Corps and similar organizations in which large allotments of money were set aside for the training of the disadvantaged.

We are facing an imminent possibility in Venezuela and other countries of an increasing unemployment rate. Before this seminar concludes, I wonder if we could have somebody react to this question and describe some of the major programs such as the Neighborhood Youth Corps and other similar programs.

Is this essentially correct?

MR. PALACIOS: Yes.

MR. KUNZE: I would like to have John Beaumont give us a first impression, if you will, John.

MR. BEAUMONT: In regard to the disadvantaged in the nation, the comments of Professor Horowitz, I think, were accepted by most of the nation, that there was a chance for everybody.

Fortunately, this nation became aware that the chances were not there for everybody in the same proportion. Many of us in education have been trying to push this point of view for a long time, but without the success that we thought we might have had.

The initial push in this direction was the passage of the Manpower Development Training Act in 1962. That was followed with what was known as the Economic Opportunity Act.

Those two pieces of Federal legislation have put great emphasis on the needs of those in our society who, for one reason or another, have been rejected or who have not found it possible to become an active part of the society. There were many reasons for this, but one of the major ones was the change from a hand to a machine economy in agriculture, with the result that thousands of individuals moved from the South to the major industrial centers to find employment, in other words, to find the very substance of life, food, shelter and clothing.

Two types of programs have resulted from the legislation. The Manpower Development Training Program has, for the most part, been conducted through the educational system and through business in on-the-job programs.

The Economic Opportunity Program has tended to be developed through community action groups, directly through groups in the communities who have been formulated to try and put in motion programs to reach these disadvantaged people.

This has posed some political problems. It is a new direction in this nation for the Federal Government to go directly to groups and communities. The Federal Government historically has moved primarily through the states or through the political organization in the cities.

In answer to your question, "What are the results," we have probably learned more about the problems than we have solutions. We have learned some ways to train these people, but we found that training alone was not the answer.

Many of these people had been so rejected by society that their attitudes were hardened to a point where training was meaningless. They had first to be convinced that there was a place and that there would be a place in this society for them.

This is a much more difficult problem to attack. We have been trying to deal with the most disadvantaged in our society, those who have been rejected. We found we were training people from families who had been on relief for one and two generations. In that kind of situation, you must try to change attitudes, make these people realize that you are trying to be helpful, and that you can open doors for them.

The most important thing that has happened so far has been the realization on the part of large segments of society, business, professions, industry, education, that here is a problem that we must do something about and that we can do something about it.

This change of attitude alone, in a matter of a few years, has been a tremendous development in our nation. We do have some ideas about training, about motivation, but there have been many mistakes made in operation.

We have longed to reach these people. We find we can reach them through those who are experiencing the same kind of situation.

This has brought about a re-engineering of jobs. It has brought about a whole new spectrum of human services. By inducing the very people who have been disadvantaged into serving their peers, we are beginning to make some progress. This is the most important thing we have learned. These people we have to reach through their peers, not through some formal institutional structure.

For instance, we hired people from these groups as counselors. They were not trained counselors, but they were able to go in and do things that we couldn't do with trained counselors even when they didn't know how to start in this kind of situation. These are the kinds of things we have learned. They are not being applied as well as I would like to see them applied, but we are further ahead.

I have another question.

Some of the panel comes from areas that cover commercial training. Could you or some panel member work in a few comments on that? How does commercial differ from industrial?

Those engaged in industrial and commercial fields tend to think they are quite different, but they are not as different as they like to think.

This involves some of the status symbols that exist in this nation. To train for the office may seem to be, to some people, a different realm than training for industry, but in the final analysis, the methodology is much the same. They are both training in skills, and we hope they are training in attitudes, because they have to get along together, whether they are in the factory, or whether they are in the office.

The commercial work and the industrial work will be carried on in the same institution and the training of the teachers will be quite similar, aside from their content.

Their methodology is not as different as they like to think.

We are beginning to learn in this nation for the first time that vocational education is a common entity. Preparing people for the world of work whether as a dental technician, a welder, an electronics technician, a practical nurse or a stenographer is not fundamentally different, only the content is different.

This realization has come about, to a great extent, through our manpower development training program.

Historically, in vocational education, these are various areas that were carefully separated, and we tended to develop that separatism, but fortunately, new legislation is forcing them together. We are finding that, whether you are training for the human services or for industry, there are not many basic differences.

I would like now to recognize the delegate from the United States.

MR. SEWELL: Thank you.

I just wanted to add to Mr. Beaumont's comments on the Youth Corps. Some of the programs were especially designed to deal with the question of the disadvantaged.

As Executive Staff Member of the Bureau of Work-Training Programs of the U.S. Department of Labor, which administers the Neighborhood Youth Corps and other such programs, I would like to make a brief comment on an aspect of this.

In 1964, when the Economic Opportunity Act was designed, Part 1-B dealt with the question of trying to redirect out-of-school and unemployed youth, who were mostly found in our large urban areas, into some meaningful work.

The compound problem was that many of these young people, having dropped out of school, dropped out of the one basic institution that could provide them work skill. Consequently, our Bureau of Labor Statistics indicated that the number of young people in this category, between the ages of 16 and 22, was over 27 percent as of 1964.

Without any sociological analysis, one can imagine the type of social problems this poses for young people who are not part of the economic mainstream.

The Neighborhood Youth Corps was set up and sponsored at first by many local communities, city or county agencies, to provide work experience for these people within this category.

After two or three years of experience, we found that another compound problem was that the work experience and paying a young person $1.25 per hour for six hours of a work day, plus two hours of remedial counseling or remedial education, was not enough to project him into the work market. After two or three years, the young individual still was faced with the problem of being an unskilled worker. This meant that the Neighborhood Youth Corps had to provide more meaningful training other than just work experience.

At this point, 1968, after 3 ½ years of operation, the type of programs that are being funded are those which provide entry level skills in work-training to these young people.

In addition, part of the Economic Opportunity Act created a Job Corps. The Job Corps dealt with the same population group, from 16 to 22 years of age, with one stipulation, they provided a camp away from the disadvantaged community.

In other words, a retreat or boarding school away from his home. Industry was engaged to utilize their technology to help with remedial education and the training of these young people.

This program had definite advantages, because you could now create a sort of sub-community where the individual is not influenced by the negative pressures of this disadvantaged community.

Here again, the program was highly expensive, but it resulted in meaningful training and also meaningful job development.

These two types of programs for youth, the Neighborhood Youth Corps, which provides the training while the youngster is still living at home, and Job Corps, which provides the training for the youngster living away, are still undergoing an extensive evaluation. There have been many critics of the Job Corps Program, which is administered by the Office of Economic Opportunity, because it is highly expensive.

It is estimated that the cost of this is anywhere between $8,000 and $11,000 per youngster, where the industry provides the total training and job development after.

At this juncture, we are undergoing a radical change in the Neighborhood Youth Corps Program to make it more meaningful to meet the needs of the disadvantaged youth.

MR. KUNZE: Thank you very much for that comprehensive account of the programs now in force.

MR. SEWELL: We also have some literature on this, if anyone is interested, right outside.

MR. KUNZE: There is literature outside, if you are interested in this further.

We are running out of time. I would like to have Dr. Horowitz react to a couple of questions and then Mr. Taylor.

DR. HOROWITZ: If I may use the prerogative of the microphone again, and I shall make one more comment on the question that Mr. Palacios raised orally and that is, "How successful were the programs?"

These programs are successful in certain ways and we are still evaluating them.

I think one other point that I would like to make is that the success or failure of these programs depends on there being enough jobs for these people after they are trained.

Unless we in the private and public sector can provide the jobs after these people have been trained, the programs will not be very successful. We must bear in mind that the economic opportunities are on the demand side as well as on the supply side.

The question I have in front of me is this.

"If the basic education were limited to eight years' duration, do you think the economy of the United States would be in a condition to provide employment opportunities for all of these youngsters?"

I think you can look at this question in two different ways. If we would permit all persons in secondary school systems to quit and look for jobs immediately as of the age of 14 rather than 18, what would happen to the labor market? The answer probably is that we would have an exceedingly difficult time placing them on the jobs that are available.

The other view is, would these people be qualified for the kinds of jobs that are normally open? I would say that, in many cases, the answer would be yes.

In many cases, we would find that a person with eight years of school could perform the job that is currently being performed by a person with a high school education.

We found, for example, during World War II, that we could employ and utilize people who had very little education and very little training, and I think it could be done again.

If high school graduates are available, employers are going to hire high school graduates.

If, in the next 20 years, we have our total population going through universities, employers are going to insist that the sweeper they hire have a university degree and perhaps even a Ph.D.

If they are available, why shouldn't they hire them? If they are not available, I suspect employers would be willing to hire people with less education and less training.

MR. TAYLOR: I would like to deal briefly with something I think of great importance to you gentlemen.

We have been beating around a subject for the last two days that is pretty vital, and that is getting our young people to know the world of work.

When I graduated from high school, an industrial arts program in which I learned how to use a hand saw and a plane and made a set of bookends was the only orientation I had to work.

This has been expanded over the years to substantial experiences, available in our comprehensive high schools, but as somebody pointed out, a lot of people don't get to high school.

There is an experimental project going on at Ohio University to change the curriculum of industrial arts program for our junior high school.

For the first time in the history of this country, to my knowledge at least, a youngster will know what a contractor is, he will know what a labor agreement is, he will know what a union is, he will know what a real estate agent's job is, he will know what blueprint plant specifications are. Whether he goes into high school or drops out, he will have enough background so he can plan his future.

He will at least have a limited knowledge of the world of work that faces him out there in the cold, cold dawn.

I have a question here. A gentleman interested in training in the military. I think I can answer that rather quickly.

There are almost unlimited quantities of training materials and almost unlimited areas of training that are available from the Government Printing Office. I had occasion to take advantage of one of those training programs, the electricians mate, in the Navy. I trained from electricians mate first class and chief petty officer. You go right on up this scale. It is almost an apprentice training program. It is quite parallel to it with a correspondence type operation.

You will find them for almost every one of the skilled trades.

For our course in rigging and knot tying, we used a Government publication on rigging, put out for the Army. We take out of it the picture of the tank and put in a transformer. The same rigging, the same procedure would apply. Just a matter of changing the connotation.

These materials are available through our Government Printing Office, and I am sure they would be very happy to provide you a listing of these materials if you are interested.

The Armed Forces "Project Transition" is, to my understanding, primarily a counseling program but also is a training program oriented to civilian occupations.

For example, let's say a young man came out of a nuclear submarine. What job opportunity is available to him?

I know at least ten of them that found jobs in a nuclear power plant in Ohio.

They made the transition from the nuclear submarine to the nuclear operated power plant since they both use a reactor. It is just a matter of using the simulator this gentleman referred to earlier and becoming familiar with a particular installation.

MR. KUNZE: We thank you, Joe.

We have one other question that has to do with counseling.

"How is it accepted by the trainee, how extensive is it, how well trained are the counselors, is there any continuing or follow-up of counseling?"

Let me respond to these questions quickly.

In many instances the counseling is not accepted by a trainee. I am thinking of disadvantaged trainees now, who are not willing to accept authority at that point. They have left school to escape the authority of other people, their teachers and others, and it sometimes requires a reconditioning process and a good counselor to bring the counselee around to a point where he will be amenable to self improvement suggestions.

The second question is how extensive is it?

If a person is talking about counseling in general, there is not nearly enough of it. There is not enough of it in the schools.

For example, in some of our states, we have ratios of 500 pupils to one counselor.

You can imagine how much counseling a student gets with that kind of a ratio.

In the United States, we have some 50,000 counselors now.

An inventory has been taken of these counselors, and the opinion of those who made the studies is that about 50 percent of them are qualified.

The projections indicate that we will need to double our counseling personnel within five years, so we really have at this point 25,000 well qualified counselors, and in five years we are going to need 100,000 of them.

A good professional counselor will always follow up his cases, but they are overloaded now, and there isn't enough follow-up among counselors in general.

Mr. Taylor has one comment concerning the question on counseling.

MR. TAYLOR: I hate to keep you longer, but I think we are all here to learn.

There is another experimental project being conducted which the IBEW initiated. We have developed a $10,000 scholarship program with our employers to provide employment in the summertime on construction jobs for trainee industrial arts teachers.

They will know something about the industry, will have gotten out there and gotten their hands dirty and, therefore, will be in a little better position to counsel their students.

MR. KUNZE: Very good, Joe.

In conclusion, I know I speak for the entire panel in saying that we enjoyed being with you. I know also that all of the members here would be very willing to answer any questions to help you in any way if you would care to communicate with them from this point on, and you have their addresses in the program.

So with that, best wishes for a successful seminar and bon voyage.

Thank you.

(The meeting adjourned at 12:35 p.m.)

PROCEEDINGS

September 11, 1968

MR. MC VOY: The Mayor of Cleveland, Mr. Stokes, as you know, was unable to join us on Monday.

He has asked Mr. Hill, Mr. David G. Hill, Executive Director of the Mayor's Committee on Community Resources, to come and speak to you today.

Mr. Hill.

MR. HILL: Thank you, Mr. McVoy.

Distinguished platform guests and delegates to the CINTERFOR Conference.

The Mayor asked me to express his regrets at not being able to attend your opening meeting to welcome you to the city.

He had pressing problems with the city's administration at the time and was unable to attend.

However, he's asked me if I might, suggest to you that the city is open to you, that we are welcoming you to the city and we hope that you are enjoying your stay.

He asked me, also, to explain to you the effort that the City of Cleveland is making to try to resolve its problems regarding manpower, or the lack of jobs for many of the hardcore unemployed people in the city.

I understand that over the past several days, you have heard stories at the Federal level and at the State level as to how they are attempting to resolve the manpower situation in this country.

I would like to bring you the story of the local level, of our attempts, using local resources as well as those resources derived from the Federal Government, in trying to resolve these problems.

At the present time, the city administration is operating a committee, entitled the "Mayor's Committee on Community Resources."

We are attempting to get a department of city government created to assume the responsibilities presently conducted by this committee to try to resolve the manpower situation.

We feel that you must have a sound economic basis as far as business and industry is concerned in order to have an open job market.

What we are attempting to do is to fortify the businesses that are presently located in the city of Cleveland by servicing them in the ways needed to maintain their base of operations in the city.

In addition, we are going very deeply into establishing new minority businesses, using guaranteed money from the small business administration, which insures bank loans up to 90 percent.

In other words, we are trying to develop small black businesses within the innercity of Cleveland.

City-wide we are working with industrialists and business people in their efforts to expand or to receive better city services.

We are also working with an organization called the "Greater Cleveland Growth Association" which is a very modern, chamber-of-commerce-type organization to attract new businesses into Cleveland.

Unlike many cities, we have some vacant land available for industrial expansion, and we intend to use this land to our best benefit.

Secondly, the Mayor's Committee is operating manpower programs and trying to match them with jobs available.

When we go out to talk to industrialists about their economic problems, we try to determine all of their problems, their problems in manpower, their problems in growth and expansion, their problems in taxes, their problems across the gamut.

We use this information in trying to determine his growth possibilities on a 3-month, 6-month, or yearly basis so that we can modify our various training programs to fit individuals for jobs that we are sure will be available 3 months, 6 months or a year in the future.

This is the effort that we are attempting at the present time in the City of Cleveland. There are more than 20 manpower programs separately funded by the Department of Labor. These programs are fragmented; they overlap; there are duplications; and in many instances organizations are unaware that other organizations exist. This is the pattern of funding from the Manpower Administration, but it is not their fault, it is the way our Congress has passed the various manpower bills.

In the City of Cleveland we are attempting to become the prime sponsor of manpower programs with the Manpower Administration.

Under Title 1-B of the Economic Opportunities Act, there is a provision for prime sponsorship of manpower programs.

The organization which has this responsibility here is called CEO, which is our local antipoverty agency. It does not actually operate manpower programs. It delegates each of these programs out to another agency and this agency, in turn, sub-contracts to other agencies. There really is no uniformity, no organization, just fragmentation of services.

We would hope to become an operator of manpower programs, as well as being responsible for the overall planning, coordination and evaluation of every manpower program that operates in the City of Cleveland.

If we are able to assume prime sponsorship under the Title 1-B, we will be able to capture 90 percent of the manpower money coming into the City of Cleveland. We can rechannel that money into a more efficient manner of operating manpower programs.

At least 90 percent of the programs thereafter will operate according to a plan that we develop so that we don't have this overlapping and fragmentation of manpower programs in the city.

We will be able to then better service the needs of the industrialists and the businessmen in the city and at the same time provide jobs to individuals through the various manpower programs.

We believe that you must have a firm economic basis in the city in order to develop effective manpower programs and to keep people in a very productive employment situation.

I might also add that this approach is being taken in other cities. New York City, through its Human Resource Administration, has a comparable kind of structure. Detroit is moving in this direction, as well as Chicago.

We are now consulting with various firms with expertise in computerization for the development of what we call a "Job Bank." The job basically will be the gathering of information on jobs available on a projected basis of 3 months, 6 months, 9 months and one year.

We will also catalog the qualifications for these various jobs.

We will get the characteristics of the population with which we are dealing as to their economic background, educational level and other factors which we can also compute.

We want to work out a system to determine on a cost-benefit analysis basis what it costs to train a person and what the savings to the taxpayer will be after the person becomes a productive individual.

Also, we will use the computerized system to coordinate training programs with the job market that we know will be there on a 3-, 6-, or 9-month basis.

We think that it's high time that the local government took a firm stand in trying to resolve the manpower situation in this city.

We think that our approach of tying in economic development within the city to the manpower programs that we have operating is the most sound way of doing it.

Thank you very much.

(Applause.)

MR. MC VOY: I will ask Dr. de Carvalho, Director of CINTERFOR, to make a few remarks.

MR. de CARVALHO: Sir, representatives of the City of Cleveland, on behalf of the delegates of the different American countries present at this meeting and on my own behalf, I would like to express my gratitude to the Mayor of Cleveland, Mr. Stokes, for his invitation to meet here in Cleveland, with the cooperation of the Government of the United States to engage in an examination/analysis of the relevant aspects of training in this country and to turn, upon completion of this seminar, to the meeting of the Technical Committee of CINTERFOR.

We knew the City of Cleveland had a great industrial past, with an intense and active cultural life and with high artistic activities.

It's been quite pleasing for us to see and to know, after our visit to Cleveland, that you are making efforts to create a new city, a city for the future.

Our attention was particularly focused on the urban problems, the integration problems, and the problems of migration and life in the metropolitan area.

We have been quite impressed by the solution that Major Stokes is finding for the problems that have come, and we appreciate very much the programs that he has organized to train marginal groups, or minority groups, and to give employment opportunity and economic opportunities in this area.

We believe that this effort being made in Cleveland will be successful, will produce results and will be able to provide to the other cities of the United States, as well as to Latin America, guidelines which will be quite useful to resolve similar problems.

I would ask you to convey my gratitude to Mayor Stokes for his invitation to celebrate our meeting here and to wish him the best of success.

Thank you, very much.

(applause.)

MR. MC VOY: Mr. Hill has to leave for a meeting very soon.

Thank you very much for coming, Mr. Hill.

Now if you will think back over the theme of the last two days' program, we hope you have been able to see a thread running through it.

As you recall, in the first session on Monday morning, we tried to give you an overview of training patterns in the United States.

In the afternoon, we gave some historical background and some of the factors that brought us to the situation that we have today.

Yesterday's panel was concerned with what we sometimes call the "nuts and bolts", or the details of how the systems work.

Some of the speakers yesterday questioned whether it is really a system and whether it really works. But, in any case, that is our purpose.

This morning, we are going into another phase. We are going to try to give you a picture of some of the institutions and organizations that are instrumental in developing, planning, coordinating and administering these training programs.

This will include Government, some of the private associations, and trade unions.

As general chairman I have the personal pleasure in introducing to you Mr. William Mirengoff.

Mr. Mirengoff has been in the Department of Labor, concerned with manpower programs, for 20 years.

Mr. William Mirengoff is Deputy Associate Manpower Administrator.

Please take over, sir.

MR. MIRENGOFF: Distinguished delegates to this very important CINTERFOR Conference, I'm delighted to be here and to participate with you in this significant activity.

As chairman I have two functions to perform this morning. One is to act as chairman for the panel and the other is to give you a brief overview, a brief summary, of the Federal training programs and their relationship to the training that goes on in the private sector of our economy.

If I were asked to characterize, in general terms, the manner in which workers in the United States acquire their skills, I think I would say that it tends to be a very informal, a very casual kind of a catch-as-catch-can method of skill acquisition. As a matter of fact, a study that was conducted a few years ago indicated that only one out of every three workers in this country learned the job that they're doing through a formal training program. The others just tend to pick it up by what the Britain refer to as "watching Nellie", watching your fellow worker.

This is pretty much the experience I have had in my work history. The first job that I had was in the bookbinding section of a large printing establishment. The day I arrived on the job, the foreman took me over to one part of the shop where they were wrapping booklets on what they referred to as a bundling machine. He said to one of the workers there: "Joe, show this fellow how the job is done." With that he walked away and that was the last I saw of him. As it turned out, the fellow worker who was supposed to instruct me had only been there two weeks before I got there. It was a very informal, nonstructured process, but somehow or another we managed to muddle through and to get the job done.

The second characterization that I would make of our training in this country is that we don't have a single route through which workers acquire skill. There are several paths and several roads, both public and private. There isn't one central controlling mechanism which integrates these various systems, or which brings together the governmental activities with the training in the private sector. There does exist an informal network of relationships which serve to link some of these things together, and we'll be pursuing this theme during our panel this morning.

We'll focus on a very important relationship, the involvement of the Federal Government with nongovernment organizations in providing training and related services. To provide a setting for this discussion I would, with your indulgence, like to sketch the historical development of the Federal Government's role in training and manpower in this country. I will trace a series of legislative enactments that mark the evolution of the Federal Government's participation in training the nation's work force.

One of the earliest and most important development in this regard was the establishment, in the 1860's, of a system of state agricultural and mechanical colleges, which we refer to as land-grant colleges. This was followed in 1917 by Federal aid in vocational schools and vocational programs at the secondary school level.

After World War II, we supported a massive program of educational and training aid to the veterans of that war. A national commitment to maintaining full employment in this country was made by the passage of the Employment Act of 1946. We regard this an important milestone in the history of our manpower legislation. This act pledges the Government to the policy of promoting maximum employment, maximum production and maximum purchasing power. Although this particular act did not contain any specific provisions for manpower programs, it did provide the commitment, the philosophical basis, for the enactment of action programs which were to follow. In the early 1960's, the national concern over the high levels of unemployment in certain geographic areas and the threat that automation and technology would result in the displacement of experienced workers, led to the passage of the Manpower Development and Training Act of 1962.

More recently, attention has turned to the persistent hard-core unemployment among the impoverished and disadvantaged groups in our population. This concern led to the establishment of our Antipoverty Program.

I would like here to underscore this development because one cannot fully understand this nation's manpower at this particular point in time unless one understands the whole manpower training effort. As far as the Federal Government is concerned, it is directed and concentrated on reaching those people in our population who have been bypassed by the general affluence of society but who must be brought into the mainstream of economic life. A great deal of our present efforts in training and manpower development is directed to the achievement of that objective.

This capsule description suggests the general flow of training activity at the Federal level through the years. It would be impossible, in the time available, to detail the provisions of the many Federal Government programs which we have on-going throughout this country, but there are as many as thirty-one different manpower and training programs.

Two of the older major Government programs, the Federal apprenticeship system and the Federal-state system of vocational education, have been discussed in some detail in your earlier sessions. Yesterday Mr. Eldridge, of the Bureau of Apprenticeship and Training, described the Government's role in the field of apprenticeship. This program is of particular significance for our discussion this morning because it represents one of the earliest links between the Federal Government and much of the training that takes place in the private sector.

The Apprenticeship Committees are excellent examples of the cooperation between government and private organizations in mounting skilled training programs.

Vocational education has been mentioned by several speakers on your program, but I will leave to Mr. Burkett, of the American Vocational Association, the discussion of how this very important aspect of our training efforts is supported by the nongovernment sector.

To round out this brief overview of our Federal Government's training efforts, I would like to look a little more closely at two of the more recent major Government programs, the Manpower Development and Training Act and the manpower programs under the Antipoverty Act.

The Manpower Development and Training Act represents a major forward thrust in the Government's participation in skilled training of the work force. The act was conceived during a period of relatively high unemployment and influenced by a concern that many qualified workers would be displaced by automation and other technological change. Thus the initial focus was upon the expected need to retrain workers whose skills might be rendered obsolete by new technology, by the movement of industry from one part of the country to another, by changes in consumers demands or by structural changes in our economy.

Much to our surprise, the expected adverse effect on employment by automation and technology did not materialize. We did not have any serious unemployment arising from the introduction of new technology. We were experiencing during this period a healthy growth in our economy, and the expansion of our economic system was large enough to absorb this impact of the new technology. Persons, who in the period of contracting economic activity, might indeed have been displaced or laid off were now absorbed in the general growth of our economic activity.

Under the Manpower Development and Training Act, there are two basic kinds of training provided. One, we refer to as institutional training or classroom training, and the other as on-the-job training, but very frequently these two types of training are combined. The Manpower Development and Training Act is unique in many ways. It is implemented, not by one Government agency, as is usually the case, but by two working closely together—the Department of Labor and the Department of Health, Education and Welfare. The responsibilities and the involvements of these two agencies are quite distinct and separate.

The Department of Labor has the responsibility for analyzing the labor market, determining what training is needed, recruiting and selecting the trainees and paying training allowances to these workers. Upon completion of the training, they are responsible for job placement.

The responsibility of the Department of Health, Education and Welfare, working through their state and local agencies, is for the actual training process itself. They are responsible for the establishment of the training facility, the provision of instructors, the curriculum, the supplies, etc. The instructional process itself is their primary responsibility.

On-the-job training, the other major type of training, is administered by the Department of Labor, which takes us into contact with private employers who agree to hire, train and pay wages to the trainees. The Department of Labor agrees to reimburse the employer for those additional costs which the company incurs as a result of this training effort.

Since the inception of the Manpower Development and Training Act in 1962, over one million persons have been enrolled. Of these, about two-thrids have been enrolled into our institutional training program, and about one-third in the on-the-job program.

It has, by and large, been very successful. We find, for example, that about seventy-five percent of the persons who enter these training programs, remain to completion. We also find about seventy-eight percent of those persons who complete training programs find jobs.

I would now like to turn to the discussion of the specific role of private organizations in the administration of these Federal training programs.

The on-the-job training program, under the Manpower Act, provides an excellent example of how the Government can enlist the resources of private industry to carry out a mission which is both in the public interest, and of benefit to private firms that are involved.

The OJT Program has been particularly successful in working through national associations and national labor unions, which have proved to be very effective intermediaries between employers and the Federal Government. In these situations the Government enters into a national contract with an association or with a trade union, and the association or union in turn arranges for the establishment for programs throughout the country with their affiliated members or organizations.

Perhaps the most significant and the most recent development in this whole area of our on-the-job training has been the establishment, by the President, of a program known as JOBS. This stands for Job Opportunities in the Business Sector.

American industry has been asked by the President to form a national alliance of businessmen, a committee of high ranking persons from the largest corporations in this country, under the chairmanship of Mr. Henry Ford II, to provide leadership in securing business and industry involvement in this program. Fifty cities have been chosen as focal points for this program, and local alliances have been established in each of these fifty cities to implement this program.

The goal is to hire and train 500,000 people by 1971.

I'd like to wind up this part of the presentation by indicating what I believe to be the major focus and new direction in the years ahead. It is three fold.

One is a continuing commitment to put the emphasis on and to allocate our manpower training resources very heavily in the areas where there are impoverished, disadvantaged and culturally deprived persons—that these may be enriched, educated and brought into the mainstream of economic activity.

Two, we are resolved to get a greater and greater involvement on the part of the private sector in our economy. We are persuaded that the responsibility for reaching and teaching the disadvantaged rests not with the Government alone but must also be the responsibility of the private sector.

Third and last, we have the problem of a multiplicity or fragmentation of manpower programs all over the landscape, and there is a need to begin to bring these programs together, to secure better integration and consolidation of our training programs and manpower efforts.

Now, let us move ahead to the business at hand. I should like to proceed with the introduction of our panel.

The first panelist for this morning's session is Mr. Martin H. Bowerman, representing the American Society for Training and Development. Mr. Bowerman is Public and Member Relations Director of the American Society for Training and Development in Madison, Wisconsin. His responsibilities include the overall public relations development, management of publications and the administration of commercial services. He is a committee member in Management Relations and National Conference Exposition Management and serves as a staff liaison on specially assigned committees.

Before joining the ASTD, Mr. Bowerman was employed by the Associated Credit Bureau of Houston, and acted as its Director of Public Relations.

Mr. Bowerman is a graduate of Washington University in St. Louis, Missouri, and holds a bachelors of arts degree. It's a great pleasure for me to introduce to you this morning, Mr. Martin H. Bowerman.

MR. BOWERMAN: Thank you, Mr. Mirengoff, for that very kind introduction.

Good morning, CINTERFOR delegates and guests.

It's a great pleasure for me to be here today representing the *American Society for Training and Development.*

As Mr. Mirengoff told you, I've been with ASTD only since July 1 of this year. But, as Public and Member Relations Director of the Society, it has been necessary for me to learn as much as possible about ASTD as fast as I could, so I would be able to pass that information along to groups such as this one.

Although our organization is called the American Society for Training and Development, it is rapidly becoming an *international* organization with members from outside the United States, from outside North America and, yes, even from outside the western hemisphere.

First, I'd like to give you a few facts to support my statement that ASTD is growing in international influence:

1. Of ASTD'S 7,300 members, several hundred are from countries outside the United States.

2. Of ASTD'S more than 70 chapters, two are in countries outside the United States. Those overseas chapters are located in Japan and South Korea.

3. At the ASTD 1968 national conference in New York City last May, over 100 foreign members and guests attended, and many actively participated in portions of the conference program.

4. And, finally, several training professionals from foreign countries participate in each of ASTD's three annual institutes:

   A. The Training and Development Institute

   B. The Audio-Visual Institute

   C. And the Organization and Management Development Institute

Well, I think that pretty well establishes the fact that ASTD, although most of its members are from the United States, has a very definite and growing international flavor. Because of my interest in member relations, I'd like to see membership and participation in ASTD grow to include every individual in any country for whom the Society is capable of providing worthwhile benefits and services.

In this age of automation, one of our most awesome challenges is training men and women to keep pace with the changes brought about by technology in almost every job we do. That challenge is the mission of the American Society for Training and Development. ASTD is an elite association of professionals whose purpose is to develop and train competent managers and workers for industry, government and allied fields.

The profession itself is relatively new. It wasn't until 1943 that ASTD was organized. At that time the United States was in the midst of World War II, and the call was for full industrial production. Since those early years, ASTD has grown in scope to the international organization it is today.

Now, the Society has more than 7,300 members representing over 3,000 organizations. And the need for this membership is greater today than it has been in the past. Never before has this professional group been confronted with so many far-reaching, complex problems, resulting from automation and the need for skilled workers.

Today, ASTD is the only service organization devoted exclusively to the education, development and expansion of the skills and standards of the members of the training and management development profession.

ASTD provides opportunities for individuals to exchange ideas and keep abreast of their profession through local chapter meetings, conferences, institutes, publications and research.

ASTD *membership* provides long-term development for both the new and experienced training professional. And ASTD keeps the individual in touch with the most creative thinking and abreast of current developments in the training and management development profession.

There are many things I could tell you about ASTD but, before I do, I want to be sure that I describe for you the Society's objectives, organizational structure and how it contributes to manpower training and development in the United States, as I have been requested to do by the sponsors of this seminar.

First, I'd like to list for you some of the *objectives* that ASTD continually strives to meet in disseminating training experience, methods and ideas. These include:

1. Providing effective and continuous leadership in the field of training and development to assure a competent management and work force.

2. Promoting acceptance and understanding of training and development.

3. Furthering the professional education and development of members.

4. Fostering the interests of youth in the training profession as a career through participation in student chapters.

5. Assisting in the extension of chapter organizations and providing continuing help in order to improve chapter performance and operation.

6. Providing for effective cooperation and exchange of information and ideas between chapters.

7. Making studies in the training field and issuing reports to members.

8. And, finally, providing a clearinghouse of training information for members and management.

As for its organizational structure, ASTD is a professional society made up of individual, voluntary, dues-paying members. It maintains a *national office* in Madison, Wisconsin, which has a full-time professional *staff of 20 employees* headed by our Executive Director, *James W. Pearson.*

This staff handles hundreds of details such as the preparation of materials for publication, meeting requests from a growing number of members and conducting research for committees plus cranking out many other tasks necessary to ASTD's operation and development.

There are eight ASTD regions covering the United States and Canada, *with 70 chapters* located in major population centers within those regions.

Our Executive Director is the day-to-day operating head of ASTD, although he is responsible to the Society's Board of Directors, which is made up of several national and regional vice presidents and this year is headed by President *Richard B. Johnson* of Pittsburgh, Pennsylvania.

All of these men are working training and development professionals who serve their Society without pay. A volunteer group, each member gives unselfishly of his time, his energy and his fullest talents. Each is made available by a company or other organization which truly supports ASTD goals.

The development of Society programs and their implementation is the responsibility of the national office staff, with planning assistance and advice from *several national standing and special committees.*

ASTD is only 24 years old, but already it is recognized for its contributions to the advancement of the profession for nearly a quarter of a century. The Society has grown steadily and the fact that we were invited to participate in this seminar is an indication that ASTD is favorably recognized internationally.

Our growth has been the result of a number of events occurring outside our professional environment. These include:

1. The knowledge explosion.
2. The high speed obsolescence of knowledge and even skill.
3. The growing acceptance of the concept of the need for life-long learning.
4. The recognition that the competitive edge increasingly is seen as optimum utilization of human resources.
5. And the recognition that what we have done, and are doing, in business, industry and government, can be helpful in the community at large.

These are the key events, though there are many others which have contributed to our progress.

All of this is bringing about rapid changes for each training professional personally. In his own organization, his role is changing as he moves into larger orbits. He is closer to power centers. He is becoming involved with organization changes, operations planning, manpower planning and utilization. He is being asked to help identify and develop leadership. He is becoming an in-house consultant.

Opportunities in the larger community are emerging such as helping the disadvantaged to make their contribution to our economy and joining hands with our colleagues elsewhere in the world.

There is a possibility of the training professional's own obsolescence growing and, to avoid this, he must become more sophisticated, flexible, adaptable and he must be a constant learner and have a consistently reliable source of renewal.

Here, we believe, ASTD is the training professional's salvation. It is his career insurance policy which is giving him the results of applicable research, especially in the behavioral sciences. It is giving him material he can use to become increasingly effective in subject matter, technique, methodology and procedures. Our organization gives its members the latest information about hardware and software. And it is a constant source of many other values designed to aid the newcomer and to keep the oldtimer on his toes.

Truly, ASTD is the *"voice of the training and development profession"* and most of our members consider themselves privileged to be a part of it.

ASTD is an ever-growing organization. In 1964, we had 3,515 members; in 1965, there were 4,518 members; in 1966, there were 5,107 members; in 1967, there were 6,055 members; and in September of 1968, we can say with pride that we have an all-time high of 7,300 members. Our *goal for this year is 8,000 members representing over 3,100 organizations.*

Our national office now has a membership promotional list of over 15,000 persons engaged in training and development. Next year, we plan to intensify our membership campaign–and this campaign will be a vigorous one.

We are proud of our more than 70 chapters. During 1967-68, we chartered and welcomed four new chapters in Kentucky, New York, Michigan and Indiana.

ASTD is financially sound. In 1967, *our income was over $220,000. Our expenses were $181,000. We were able to add $39,000 to our reserves, which now total $260,000. For 1968, our budget exceeds one-half million dollars. Truly, ASTD is a growing operation.*

And, ASTD is doing some exciting things. These include:

1. Creation of a new committee on professional and public concerns.
2. Project 25, an ASTD planning and renewal project, which is dedicated to self-examination of the Society.
3. We've published a *training and development handbook,* which has become a best seller for our profession and required reading for everyone involved in training and development.
4. Our new *members memo* enriches our communication fabric.
5. And a new face is our *training equipment and services exposition,* which reflects a growing partnership with those who provide us our tools and materials. This year, our training equipment and services exposition was the largest in our history.

We now have divisions within the Society which are based upon our members' training and development functions. Our sales training division is developing rapidly. And our new organization development division held its first meeting during last May's national conference and presently is accepting charter members.

We are pleased with the healthy growth of our three fine institutes. These include the two-week Training and Development Institute, now holding winter as well as summer sessions, our Audio-Visual Institute and our Organization and Management Development Institute.

And many fine things are being done at the ASTD regional conferences. There are also many excellent workshops and seminars which are being conducted in increasing numbers by our chapters.

Finally, the value and prestige of our *training and development journal* is constantly growing. It is known throughout the profession as the outstanding technical publication in the training and development field.

Last May in New York City, our conference theme was "Challenging Frontiers in Training and Development." As these frontiers are reached, ASTD is prepared to move forward, as it has in the past, to cross them. If some of those frontiers develop in your countries, we hope we can work with you for the common good of our profession, our people and our countries.

Thank you very much.

(Applause.)

MR. MIRENGOFF: Thank you Mr. Bowerman for a very well organized, informative presentation.

Our next speaker, a gentleman whom I have known personally for some time, and who has been very actively engaged in serving on our National Manpower Advisory Committee. This is a committee of distinguished citizens who advise the Department of Labor and the Department of Health, Education and Welfare in the field of training and manpower programs.

Mr. Lowell A. Burkett is presently the Executive Director of that very important and distinguished organization, the American Vocational Association.

Mr. Burkett was educated in Illinois, attended Eastern Illinois State College and received both his bachelors and masters degrees from the University of Illinois.

Mr. Burkett's vocational experience is that of a journeyman carpenter.

He's had extensive teaching experience, including teaching in rural community schools, elementary school, high schools and the University of Illinois.

From 1955 to 1966, Mr. Burkett was the Assistant Executive Secretary of the American Vocational Association and since January of 1966 has been the Executive Director of that organization.

I'm very pleased indeed to introduce to you Mr. Lowell A. Burkett.

MR. BURKETT: Thank you, Bill.

It appears that I am going to have to turn back the hands of time just a little bit in order to be able to have the meeting stay on schedule for this is a very important meeting.

I am delighted to have this opportunity to spend a few moments with you today to discuss the activities of the American Vocational Association.

First, I would like to bring you greetings from the 43,000 vocational educators in the United States and some 26 nations throughout the world.

Although the name says the American Vocational Association, it should be changed to the International Vocational Association because we do have members and participation from any nations throughout the world.

It would be difficult in this short period of time for me to discuss with you all of the activities in which the Association is currently engaged.

I think it would be best for me to briefly describe the Association and a few of the important activities in which it is currently engaged. In the period of discussion, or question and answers, you may have some specific questions to ask me.

I have to go back in the history of the Association to really outline for you its objectives.

At the turn of the century, the business and industrial community of this nation recognized the great shortage of skilled manpower due to the impact of the industrial revolution.

It was a group of industrialists and labor leaders that established the first organization for the purpose of promoting education and training to provide more skilled labor for the industries of this nation.

They established the National Society for the Promotion of Industrial Education in 1906. This organization was first an organization of people who were interested in a promotion of concepts.

As time went on, the trainers, the people responsible for the training process, joined with this organization. Today we still have in the organization not only the people engaged in the process of teaching and training people, but those who are interested in the promotion of the concepts of training.

In 1926 a number of organizations that had grown up in various sections of the nation joined together to form the American Vocational Association and set as their objectives, to which we still hold, the following:

First, the establishment and maintenance of an active national leadership in all types of vocational, and we should add the word "technical", manpower training.

Second, to render service to state and local communities in promoting and establishing manpower training, or vocational education programs.

Third, to provide a national forum for the study and discussion of all questions involved in vocational education.

Fourth, to unify all the vocational education interests of the nation through representative membership in an organization.

Next, and I wish you would please note, to cooperate with other nations in the further development of vocational education and to welcome international membership and participation.

Last, to encourage the further development and improvement of the program of education, related to training people for employment.

In 1914 President Woodrow Wilson established the National Commission for the Study of Vocational Education.

Following that Commission Study, a report was made to the United States Congress which led to the passage of the first Vocational Education Act in this nation.

This is a rather historical development, because it placed responsibility in the public schools of this nation to help youth and adults become trained to advantageously enter into a given occupation and to advance in that occupation.

The Association is interested in promotion of a concept of education that will help people become employed.

This is our major objective.

It is also interested in assisting those who are engaged in the training process to find new and better ways of training people.

We have a somewhat similar objective to that of the American Society of Training Directors. I used "Training Directors," because this was the name of the organization a few years ago when I first was a member.

We are interested in research and finding how people learn and how people better become trained in the various activities and occupations.

At the present time, there are more than 500 different occupational fields and from which we have membership.

The organization is organized somewhat on the basis of the various major economic segments of our economy.

We have training, of course, in the field of agriculture and agricultural related occupations.

There are people who are involved in the marketing and distribution fields, in business and office education, in the health and related fields, in the trades and industrial occupations. The trades include the apprenticable trades with which we work. We have always been tied very closely to apprenticeship.

We have people engaged in the field of training for the technical occupations which are at a very high level and those who work with the engineers and scientists.

We have people involved in the manpower program, which Mr. Mirengoff described for you, who do the institutional phase of the training under the Manpower Development and Training Act.

Also, we have people who are engaged in the field of guidance which is a very important part of the educational system or process and very important to the development of manpower and vocational education in the public schools.

Not only are we concerned about the content of these fields and the training that is needed in these various segments of the economy, but we are also concerned that all people are served. This is the main thrust of the act that was passed in 1963.

We feel that in 1917 the main thrust was in the field of secondary education, but in 1963 we are promoting programs and working with institutions of all types at the post-secondary level, in addition to the students and teachers at the secondary level.

We are quite heavily involved in the retraining process, working with the teachers at the adult level.

We are concerned with supervision and administration which are very important to a well-organized and a well-conducted program.

We have a Department of Research and Evaluation.

We are concerned about preparation of teachers, because the quality of instructions that goes on, both on-the-job and in the classroom, is wholly dependent upon them. The training programs that are conducted for the disadvantaged people who have not been able to profit from the traditional instruction in our public schools are among the major areas of interest and the major functions to which we provide some sort of assistance.

Being a membership organization, we are concerned not only about serving the people of the nation through a training program, but we are also concerned about serving our members.

I have placed on the table in the corridor a pamphlet which gives you an idea of the services that we render to our members. I will not take time to enumerate those, but the major thrust of our activity is promotional and in providing new techniques and ideas to our membership.

We have a rather extensive program of work that has been developed by the delegate assembly of our organization, which meets annually during our annual convention, which will be held this year in Dallas, Texas, in the first week in December.

We invite all of you to attend this meeting.

This program of work is known to the membership so they know exactly where the major thrust is in the things we attempt to do.

The three or four major things are:

First, and perhaps not the most important, we are engaged quite extensively in work with the United States Congress attempting to create additional authority, under Federal acts, to expand and improve vocational education.

Currently pending before the Congress of the United States is legislation that would more than triple the amount of Federal money that will go into the Vocational Educational Program within the next year.

We have, at their request, assisted members of Congress in their efforts to draft this legislation.

Another major activity is in the field of evaluation. How good are our programs?

I think this is a question that we all ask ourselves, if we are conducting programs. We cannot, in the 20th century, just say we think a program is good; we must know how good it is and how we might improve it.

We are encouraging studies that will help in the evaluation of the program.

We are concerned with standards for all programs. We are working with the accrediting agencies to establish criteria useful to them in their professional responsibility of establishing minimum standard for programs of vocational and technical education.

We are also working on the preparation and upgrading of teachers. It is always awfully easy for a person to get into the teaching profession and still not be competent. We are hopeful that the legislation currently pending before the Congress will provide resources to enable teachers to be upgraded and better qualified to do a quality job.

Our efforts are also expanding in the field of international education. We have assisted the Agency for International Development on two or three occasions conducting programs under contract with them in foreign countries.

At the present time we have a contract in Turkey, five teacher-educators assisting them in restructuring the curriculum for the training of the vocational teacher.

We have many other activities in which we plan to become engaged in the near future. We look forward to working with other nations to learn from them what they are doing and to share with them the experiences that the people in vocational education have had in this country.

This is a very brief description of our activities. I appreciate the opportunity to discuss this with this group, and I congratulate all of you for your efforts in this field.

Thank you so much.

(Applause.)

MR. MIRENGOFF: Thank you very much, Lowell. We deeply appreciate it.

We have heard this morning from the Federal establishment, so to speak, and from two of the professional organizations in the field of skill training. Our next speaker represents organized labor.

Mr. Ray Lesniok is Chairman of the Skill Trades District Council Number 7. This Council embraces a very large part of the country. It covers Alabama, Florida, Kentucky, Mississippi, Ohio, Tennessee and West Virginia.

Mr. Lesniok is with the International Union of Electrical, Radio and Machine Workers. He is a member of the Advisory Committee on the Apprenticeship

Information Center, in Cleveland, Ohio and is also Chairman of the Skill Trades of IUE, Local Number 707, here in Cleveland.

I am very happy to introduce to you Mr. Ray Lesniok.

(Applause.)

MR. LESNIOK: Gentlemen, I welcome this opportunity to welcome you to our city and to our country, in behalf of the International Union of Electrical, Radio and Machine Workers, AFL-CIO.

You have heard many distinguished speakers since the seminar has begun. I feel I should touch on a few points that have been discussed earlier so that you may have an overall view of the American labor scene.

On the table at which you are seated, you will find a booklet, the IUE Skill Trades Program. The IUE is an international union of industrial workers which has a goal of trying to combat a great waste of a great nation–its human resources.

The industrial unions of this country represent people of varied skills from common labor and semiskilled to the most sophisticated of the skill trades. The industrial unions of the AFL-CIO, are involved in apprenticeship programs throughout the country, with standards that are realistic and are not of a second-class nature.

I bring this point out to you so that you will not leave this city and this country, thinking that there are two units of union, the AF of L for the skilled tradesmen and CIO for the unskilled and semi-skilled tradesmen.

The industrial skilled tradesmen come into contact with new materials and new innovations before they are ready for use by the general public.

I cite you examples of plastics and fiber glass, which industrial pipefitters had been using for years, prior to the application of these materials in the construction industry.

Another point, industrial skilled tradesmen are called upon to make rapid decisions. A breakdown of equipment often means the loss of hundreds of man hours of production. He must be alert and well trained if he is to install and maintain valuable equipment.

Far too often in too many places, these are very important points that are ignored or forgotten.

The IUE Skilled Trades Program has a 7-point objective.

They are:

1. That journeymen receive sufficient wages to encourage apprentices to learn the trade.

2. Where an inequity in wages exists, where imbalances have been created, prompt and adequate adjustments shall be proposed in contract negotiations.

3. Make equal employment opportunity a reality in the skill-trades by insisting that background, education and training are the only relevant criteria.

4. Register apprenticeship standards with the Bureau of Apprenticeship and Training, U.S. Department of Labor, and other appropriate agencies.

5. Use collective bargaining to establish skill training programs to permit workers to advance into higher-skill jobs. We must prevail on employers to utilize Federally-aided manpower programs throughout our training. Workers participating in an apprenticeship program should be credited for time spent in on-the-job programs.

6. Older workers should have an adequate chance to participate in both apprenticeship and pre-apprenticeship programs, granting them credit for past experience, training, education and background.

7. Develop pre-apprenticeship programs in cooperation with the Bureau of Apprenticeship and Training and develop educational and retraining programs for journeymen displayed by new technology.

We of the unions, are not alone in trying to utilize to the fullest the human resources of this nation.

There were formed, across the country, apprenticeship information centers housed in the State Employment Service buildings. Committees to advice on policy and procedures are formed for various industries within the cities.

In Cleveland the committee is composed of representatives from:

Associated Industries of Cleveland, a service organization for small plants who cannot afford the technical services that the larger corporations have.

The Building Trades Council. Council membership are unions involved in the construction industry.

Building Trades Employers Association, an Association Membership of employers involved in the construction industry.

Cleveland AF of L, CIO Federation of Labor representing all unions, construction and industrial, belong to this organization.

The Chamber of Commerce. The businessmen of the community.

The Cleveland Board of Education. This is seif-explanatory. The Education Department of Cleveland.

The Ford Motor Company. Management, Industry.

International Union of Electrical Workers. Union–Industry.

International Union Association of Machinists. Union–Industry.

Community Relations Board for the City of Cleveland.

Lincoln Electric Company. Management–Industry.

National Association for the Advancement of Colored People. Puplic.

NASA, Lewis Research Center. Government–Management.

National Electrical Contractors Association. Management–Construction.

Sheet Metal Workers Union. Union–Construction.

International Union of United Automobile Workers. Union–Industry.

Urban League of Cleveland. Public.

The duties of the Advisory Committee are:

To develop methods of communication between personnel of the Center and varied organizations they represent in the community.

To develop methods to encourage and promote apprenticeship opportunities for youth in Metropolitan Cleveland Area.

To act as advisors and counselors to high school guidance departments, minority and ethnic organizations and the public in general concerning apprenticeship qualifications and opportunities.

To encourage the cooperation of all employers to develop formal apprenticeship programs and select qualified applicants without regard to race, creed, color, sex or national origin.

To encourage each member to formulate a subcommittee, within their organization, to promote and establishment apprenticeship for qualified youth. If apprenticeship is prevalent in an industry, the Committee shall encourage expansion of the present apprenticeship opportunities.

To advise the personnel of the Center on ways and means by which the operation of the Center may be improved to better serve the Community.

I thank you, gentlemen, for your attention and I hope I have given you a broader picture of the American labor scene.

(Applause.)

MR. MIRENGOFF: Thank you, Mr. Lesniok, for that very brief and very complete explanation of the attitude of organized labor in the area of skilled training, and particularly the description of the apprenticeship information centers.

Now, a very wise man once said that the brain can only absorb as much as the seat can endure. And I think we have reached about that point in our proceedings and this might by the appropriate time to take our intermission.

(A short recess was taken.)

MR. MIRENGOFF: Now that we are fortified with some coffee, we ought to be able to last until lunch. We have, as you know, one additional speaker, whom I guess we can refer to as our "anchor man." The last speaker on our panel, but far from being the least, is my very good friend, Robert H. Wilson, who works very closely with the International Manpower Institute and has been a source of great strength and support.

Mr. Wilson has had a very wide background of experience in industry, training and education at the local, state, national and international levels.

For ten years, as an AID employee, he worked in South America and I am sure, many of you have had the pleasure of working with him. He is now the international training advisor from the Office of Labor Affairs, of AID. He returned only four days ago from Nairobi, where he conducted a month's training course for a group of African manpower planning and training administrators.

I take a great deal of pleasure in presenting to you at this time, Mr. Robert Wilson.

MR. WILSON: Mr. Chairman, ladies and gentlemen:

Unfortunately, I am as usual in the position, alphabetically speaking, my name starting with "W", at the end of the line. When I am standing in a line for food, it usually runs out before I get to the serving table. When I'm in a payroll line, they close the window before I get there, and today I am the last speaker on the program and we've run out of time.

I will cut my discussion as short as possible, but as I assured Dr. Bologna this morning, what I have to say will be elaborated somewhat more fully in a paper which will be distributed later.

To set the stage this morning for a summary statement, I think we should keep in mind that there has been quite a bit of talk here about training and not a great deal of talk about learning. What we all are interested in is learning and what we are investing our money in should be learning. All too often training does not result in effective learning. I think we should put as our base line or starting point the question: How much effective learning is being produced?

If we had time, I would like to talk about the learning process, how people learn and how everything that we do in training programs should be measured against that basic objective–learning which denotes a change in behavior of people. We sometimes get so bogged down in the machinery that we forget the essentials of what we wish to accomplish–changing the behavior patterns of people.

I am supposed to talk about trends and contributions.

I think that we might mention one trend at the moment, a trend toward two types of institutions in manpower development. One institution is concerned with formal education and training an individual receives before going to work and another institution is concerned with that education and training he receives after becoming employed. In both of these institutions teaching and learning are taking place, and in both there is some degree of education and training.

In the INCE-SENAI type programs the discussion is concerned with training, and we often overlook the fact that there is a great deal of education taking place also. There are some people who would like to build separate fences around the terminologies, "education" and "skills training," saying these are separate institutions for jurisdictional purposes, but a plumber, truck driver, electrician, or policeman needs education as well as training.

I do not want to get involved in the philosophical discussion about what is education and what is training, but for our general purpose, we might say training is skill-getting, learning how to operate, and education is skill using–knowledge of which skill to use, when to use it and general basic information.

If we can use that rather simple definition for education and training, which I realize is too oversimplified for some professional educators, it will facilitate our looking at the educational processes, learning processes, teaching processes, and training processes that are going on in both the formal education and training systems, and in the industry, on-the-job upgrading type production oriented activity.

The organization of the program for this three-day seminar seemed to be quite simple at first but turned out to be a real challenge when we analyzed the background of the potential participants in the CINTERFOR Technical Committee Seminar.

Because of your years of experience in education and training, under so many varying conditions in different countries, we felt the how-to-do-it type of program would be quite inappropriate. Certainly, many of you are masters in the professional arena.

In searching for a program theme we were continually confronted with the fact that change is inherent in education and training for manpower development. We settled for, and I think appropriately, the general theme of training technology in transition. Naturally, we needed an activity or vehicle by which we could accomplish our purpose. So quite frankly we decided to take the U.S. system apart in front of you, identify the patterns, the factors that have influenced the development of these patterns, attempt to provide a description of how the patterns work and invite your questions, comments, criticisms and suggestions.

We would like to think of this program, not simply as an exposure of how we think our system works, but as a mutual learning situation in which, with your assistance, we examine the elements, the relevant factors, the trends and contributions in relation to relevant accomplishments.

We hope this approach has been an interesting and beneficial experience for each of you participating in the activity. I personally have learned much. I hope our objective has been realized and that each of you, because of your participation in the activities during the past three days, your questions, comments and criticisms whether expressed orally or just mentally, has also gained some effective learning.

I trust no one in this group will take the position that you have been subjected to a subtle attempt, or maybe a clumsy attempt, to put you through a training program.

We, as U.S. members of the CINTERFOR Group, appreciate having the opportunity and the privilege of participating with other Group members, as equal partners, in the design and promotion of education and training for development in the Americas.

From my 10 years experience in Latin America, I am well aware that we in the U.S. have much to learn from fellow educators and training professionals in Latin America. We welcome your questions, comments, criticisms and suggestions.

As I was listening the past three days to the unfolding of the U.S. education and training system, I began to realize how much has been done in Latin America that is relevant to current problems in the United States. For instance, the program that was started in Brazil, the PCTPI (Cooperative Program for Intensive Training of Industrial Personnel) Program, is the type of thing that is starting to be promoted in the United States. While I was in Africa this past August meeting with the Economic Commission of Africa they had made a very elaborate study of the PCTPI and SENAI programs in Brazil, and the INCE program in Venezuela and recommended such programs for consideration for adoption in Africa.

Since I had a small part with Drs. Pontual, Bologna and Furtado and others in this program in Brazil, and Dr. Palacios in Venezuela, I feel quite elated that these programs will be adapted for operation in Africa and hope that the people in Brazil and Venezuela will respond to requests from Africa to provide technicians and assistance to that program.

I mention this to illustrate that all of the important innovations in the field of training don't happen in the highly developed countries.

To get on with my topic, "Significant Trends and Contributions," each of us participating in this seminar would probably make a different list, depending on our backgrounds, sense of values and priorities. I will enumerate a few of what I think have been the most important ones, and I suggest you may wish to compare your list against mine. I shall mention the contributions first. One of the most important contributions, I think, is basic education as a foundation for skill training.

It has been my experience that one of the greatest problems with which we are confronted when establishing training programs within industry, business and Government agencies is the lack of basic education on which to build a superstructure of further education and training. The decentralization of education and training, I think, is one of the strong links in manpower development in the United States. In the U.S., education and training is everybody's business. Not only does everybody get involved, everybody argues about it, nobody is satisfied with it and once people become dissatisfied with their education and training system, they begin to take a better look at it and attempt to make improvements.

Education and training is change and it must continue to change as societies change and economic development takes on new form and emphasis.

For an example of decentralization, lets look at the school system in Illinois. There are 1,950 different school systems in that state. One can imagine what confusion there would be in some countries if a minister of education had to contend with 1,950 different school systems, school boards, parent-teacher groups, advisory committees, etc. These different boards of education are elected by the people, and different groups of parents have different goals and objectives and different budgets for each. They levy their own taxes in their own community, collect their own taxes and spend their own money. In Virginia, my home state, there are 110 different Boards of Education, each responsible for administering the public education system within its respective areas–so it also is decentralized considerably, and this is the pattern for each state in the Union.

The fact that everybody is involved in education and training, that it's everybody's business, makes it that much more important and effective. Each community becomes responsible for all elements of a program based on need, not only general education programs but all kinds of extension courses, supplementary and upgrading courses, correspondence schools, part-time cooperative courses, etc.

Job mobility has been mentioned before and I will not dwell on it as a contribution. One gentleman said this morning that only one out of every three workers had learned his occupational skills through some kind of formal education system. Most of us present in this room learned the skills we are using today outside of a formal education system. These learning experiences were most probably unstructured, but for many of us it was the only way to acquire the required skills. Job mobility can be an effective contribution to manpower development but to be effective other elements such as an employment and placement service and structured on-job training must be present in order to guarantee optimum worker utilization.

Union development and participation is a fourth important element, and I would like to have time to talk more about the role of the workers and organized labor. Working with countries in Latin America and Africa, I have observed in too many instances little or no evidence of worker or labor union interest in promoting education and training programs.

Labor unions in the states with their leadership, their negotiation ability and support of training have made manpower development activities much more effective. Employers, in many cases, were satisfied with the status quo of organization, operation, production and wages. But once they had to contend with an organized labor union and through negotiation raise wages, provide better working conditions, etc. which increase cost of production, the employers were motivated to raise the skill of their workers in order to compete with other companies. In this and many other ways, including the operation of programs for apprentices and skill improvement for their membership, the labor unions have been a very strong force in promoting training and manpower development in this country.

You can see a good cross-section of the private sector's contribution in the exhibits we have here. There are hundreds or thousands of companies, small and large, some with very large components for education and training and general learning, down to the small companies who only have two or three people engaged in training. Through the people who run the correspondence courses, develop the new technology, do the research, develop teaching materials, etc., the private sector has made a great contribution to the promotion and development of manpower.

I could talk to you for a week on the contribution of apprenticeship. It's one of my favorite subjects so to speak. Unfortunately, it is a program for which many people are always trying to find a substitute. The real problem is that they never really understand apprenticeship, thus they are looking for a substitute.

When you read the history of industrial vocational education and training, you will observe that the pendulum swings from side to side on apprenticeship.

First there is strong support, then against it. Few people take the time to learn that apprenticeship is a system and not a method. It provides an opportunity for labor, management, government, and the public to work together. The system can be designed to include a wide variety of incentives as well as checks and balances. It has been my experience that in developing countries where there are serious unskilled manpower problems, you will find no semblance of an appropriate apprenticeship system which makes it possible for employers, workers and government to formally participate in manpower development.

One other great contribution to manpower development in the U.S. resulted from training during World Wars I and II. You don't often hear this talked about nowadays, and I wouldn't suggest you go out and get involved in a world war with the hope of improving your manpower situation. In our case the situations were major factors in skilled manpower development. We had to marshall all our forces to train people quickly for new jobs. We had to train professional people, craftsmen, operators, technicians for the Armed Forces, etc. etc. The skills developed made a lasting and effective impact on industry, business and government in this country. Someone has already mentioned the veterans training programs through which millions of young people were able to get further education and training. The TWI Program (Training Within Industry) was a very important program. This is a basic program for supervisor training and a basic program for getting industry ready to train its own people. It came out of World War II and has spread worldwide. The accomplishments made through this approach in San Paulo, Brazil, in Bolivia, in Venezuela and other countries have been fantastic.

May I digress a moment and say that economic development is dependent on the production of goods and services. This action does not take place in the office of manpower planning or in the office of the ministers of labor or economics. It takes place at the work station, wherever it may be, and unfortunately, many people overlook this fact. If you want to make an impact on economic development, you have to place the emphasis where the production of goods and services take place. For example, in a school situation the production of learning takes place in the classroom where the two main elements, the teacher and the pupil, are engaged in the learning process. However, too many people put their emphasis at the top of the organizational system hoping change will seep down and eventually get down to affecting the work place.

On the other hand, in San Paulo, for instance, manpower development officials opted for an immediate impact on economic development and they quite appropriately placed emphasis on production. They went right into industry, business and the Government agencies to train the supervisors, foremen and workers through the TWI Program and followed this up with skill improvement programs for employed workers. Too many people are looking for complicated ways to do things when there are some very simple ways right at their elbow. There is plenty of testimony to support this, and I see lots of heads nodding in agreement with me on this point of view.

The first manpower agency created in the U.S. during World War II took the regular 30-hour supervisor's training course and converted it into three 10-hour package courses, and the result has been one of the major contributions that came out of World War II.

We have talked quite a bit about training for the optimum production concept in the United States, its importance in the development of technology, and in production of goods and services. In the United States we went in one direction and England, for instance, went in another direction. We went in the direction of single skill operation, on-job training, and mass production in our factories. We have used engineers to design processes which elimates the need for all around trained craftsmen in the production process and you are aware of the success that we have had in the production process.

England went the other direction. The production process was designed through use of all around skilled craftsmen who were trained in the apprenticeship type of program. It has been a costly process and you know what has happened to England in its export trade. It has dropped behind many other industrialized nations but they're modernizing now. Twenty-four training directors from England recently spent three weeks taking a look at how we have geared up our factories through this production process design and the single skill operation. This concept is important for a developing country, and it's important for its training programs.

The training for production concept can work satisfactorily as long as you design your production situations in such a manner that the learning of the individual takes place in a structured situation and is not left to trial and error.

The ninth and the last contribution that I'm going to mention is the consumer potential and competition within a free enterprise system. It has been talked about a great deal during this seminar because it has been one of the important factors in our manpower development system. Because of the profit motive and the tremendous consumer potential, industry and business in the U.S. have been motivated to adopt the most modern technology and processes man can design. Continuous change and updating the technology has forced the organization and maintenance of effective training technology. This is one of the resources we find in the American Society for Training Development with over 5,000 members from the private sector.

It has been easy to identify contributions to record on our list, but when it comes to trends I am somewhat lost. I have asked quite a few people around the room about what they consider to be some of the trends. How do you recognize the trend? What does it look like? What are its characteristics? Many times we have identified what we thought were trends, and they turned out to be fads or innovations. A good example is women's fashions, particularly ladies' skirts. What is the trend? Are they going up or coming down? When is a trend a trend?

For instance, if you should look at apprentice training over a short span of time, right now, for example, you might say that people in the United States don't want apprenticeship training anymore and come to the conclusion that the trend is against apprenticeship training. However, if you'd look back over one hundred fifty or two hundred years, you'll find there is a cycle. The pendulum swings from one side to the other in rather rythmic cycles.

When does a trend become a basic movement, one that is going to be a lasting thing and when is it a mere rejection of some operation based on vested interests, political motivations or a mis-application of the system, without a judicious decision being made as to its appropriateness? As Dr. Palacios was asking yesterday, how do you know which method of training to use under certain conditions. Too many times attempts are made to use an apprenticeship program in situations for which it is not designed and in which it is not applicable. Then the conclusion is reached that apprenticeship is outmoded. The apprenticeship program to be effective must be designed to meet the needs under certain existing conditions. Changes in needs and conditions dictate the need for changes in the system.

What I want to point out here is that we need different measuring sticks for different systems. If you're going to measure Dr. Lowell Burkett's vocational education training program in the formal education system with the same measuring stick that you use for the SENAI Program in San Paulo, it won't work. While I said there's teaching and learning going on in both places, one must remember that they have different goals and objectives. The goals and objectives of the formal vocational education system are much broader than just occupational training. There is social development and many other aims involved. You can't use the same yard stick to measure these two distinctly different programs.

When people start measuring trends, they must be careful not to be confused with fads and innovations. Frankly, I'm having trouble identifying trends. Significant trends have always been difficult to identify at any one particular instant and one must be careful not to confuse innovations with trends.

Mr. Mirengoff was talking this morning about the twenty-five or thirty different training programs that are going on now through his organization in collaboration with Dr. Burkett's organization. Some people may be tempted to say that these new programs are trends. However, if these are trends then the CCC Camps or programs were a trend, the NYA Program was a trend, and the WPA Program was a trend. I claim these were all administrative arrangements for fitting training to certain kinds of situations. In fact, many of them were actually experimental programs.

One direction that you may see coming out of these programs is a great deal more recognition today of the need for full employment and full employment policies. The need for a job for each person so that he can earn his living and have the kind of a life he would like to have through earning his own money and not living on a handout or dole. This seems to be a trend. These other things are ways and means, or methods of making it possible for this individual to live the kind of life that he would like to live. The education and training program is providing for this.

Without careful examination one could very easily reach the conclusion, so loudly exclaimed by some people, that the apprenticeship system is not appropriate in modern technology. Even our distinguished economist here the other day was emphatic in his statements that it should not take four years to learn how to spread pre-mixed paint on his house. Yet, he would probably be one of the first people to complain about the lack of skill of a present day painter, if it should rain while his house was being painted, and he took the painter into his house and put him to work refinishing the wood paneling in his den.

You never hear the professionally trained person clammoring for shortening the training program for dentists, lawyers and other professionals, but too many of them will clammor for shortening of training for skilled workers.

Apprenticeship has all the elements of effective learning, on-the-job structured work experiences supplemented by technical information, education and training. It's designed for a specific purpose and has specific goals and can fit into any kind of a training situation, whether it's for nurses, lawyers, engineers, or skilled workers.

I think one of the important trends is the development of professionalism by training personnel. The ASTD (American Society for Training and Development) is a good exponent of this. The training of professional training people has also been tried out and work very satisfactorily in Brazil and Venezuela. Training directors and training people have developed teaching materials for the administration, supervision and training programs and have been training coordinators to coordinate between industry and the vocational schools.

In fact, with the assistance of CINTERFOR, training programs for professional training people are now being operated in several different Latin American countries. This is a real progressive move in developing training professional people.

At the moment, I suppose that the basic training program for professional training people in the United States other than through formal educational institutions is the one being sponsored by the American Society for Training and Development and its local chapters.

In summary, with regard to trends, one must be careful about how to identify them. We should be careful to measure them and evaluate them against the basic laws of learning and against effective practices in training. One of the trends, I think, could be the one mentioned by the gentleman from the Office of Education. Today, we're seeing in the United States more occupational relevance involved in vocational education. I think it's safe to say these are trends. I've seen them growing long enough to say they are not just fads. I've seen it happen in other countries as well. The trend is toward more relevance of training, more articulation of training with on-the-job activities, production requirements and that type of activity. There is more interest in making the formal education program on the secondary level, more meaningful and articulated with the occupation and the future work of the young people.

These are trends that we can evaluate and be sure they are taking place.

There are some people who want a nice simple formula for development of the work force. Our system does not accommodate such a desire in the United States. I think you've seen here all sides of our system. The labor side, the management side, the government side and the various views of the overall system have been exposed to you. While it may seem complex and confusing, it also is an indication of how many different organizations and how many agencies participate and how decentralized it is in this one overall system.

When you talk about the American system for education and training and try to select out one system as being average or typical, it is difficult. It is like saying that New York and Cleveland are the United States. Each system has its own aims, objectives and peculiar elements. Certainly you would have to see many parts to understand the system.

Our system, I wish to believe, is democracy at work. It is everybody's business. It is the American way of life, and we must be on guard to identify trends that lead to centralized control, centralized curriculum of arbitrary determination of who shall be trained, what kind of certificate they will get, what values those certificates will have to centralized agencies operated by the government to provide trade tests, etc. Those are the things that we must guard against.

I think what has made our education-training systems effective and allowed them to make the contributions that they have is the fact that it is democracy at work. We have to guard against trends that may change this process. There are trends today, forces working, which would like to set up centralized agencies. You heard the labor man speak yesterday about organized labor's feeling toward any government operation for choosing who's going to be trained in what. We have to guard against this kind of danger.

It's been my pleasure to be with you. I've talked too long. I've rambled a great deal I know. If there are any questions or answers, perhaps later on in the day I can discuss them individually with you.

Mr. Chairman, I apologize for taking so much time, but I just could not summarize all the important elements of the program without going into some detail about a few of them.

There is one point that I wish to stress before I finish which I think is most important. I have seen so many people travel around the world looking for an easy or mystic formula for education and training. It sometimes seems that they must see every "tree in the forest" before they can make up their mind what the forest looks like. I have found that there is no mystic formula for skill development. However, it is quite simple once one understands that the basic purpose is learning, that all learning must take place within the learner, that the purpose of teaching is to provide learning experiences and that administrative arrangements or training machinery is designed to produce learning.

When these fundamentals are kept in focus, then training becomes an uncomplicated and natural process.

There is no mystic formula. It's a matter of judicious decision as to the use of the right methods and the right techniques to provide a learning situation in which an individual can learn how to do a job. It's just that simple. I don't think you have to run all over the world to learn how to do it. You just have to roll up your sleeves and do a little work, and you can do it at home.

Thank you.

(Applause.)

MR. MIRENGOFF: Thank you, Bob. I think that was a very interesting, rambling presentation. I think it was very appropriate for the summation of our panel because, in a very common sense way, I think you touched upon the real problems with which the delegates of this conference are concerned.

We come now to the question part of the program. You folks on the other side of this table have been very patient in listening to all these presentations. I think it's now your opportunity to come back at the speakers. I also suspect that there may be a great deal more wisdom out there than there is up here. At any rate this is the opportunity for you to ask whatever questions, or make whatever comments you would like to make.

We did receive a number of written questions which we'll try to address ourselves to first. After that we'll get to any additional questions that you want to make orally from your seats, if time permits.

We've asked our interpreter to state the first question for the audience.

INTERPRETER: I would like to know, with respect to procedures set out by the Federal Government of the United States, the following points:

One, in the contracts for services and purchases of the Government, are there requirements related to the existance of training programs with the contracting companies or enterprises?

The other question is: Is there any cooperating in training with men in the educational field, those in the labor field and the Federal authorities to provide incentives for the manpower programs?

MR. MIRENGOFF: Thank you. The question is a very good one.

Now, we have heard the question both in English and in Spanish and the problem comes, who will volunteer to address themselves to answer the question?

It is a rather complicated series of questions and there is no other volunteer, I will at least undertake to open the discussion and then I think I will turn to my associate Lew Earl and ask him to supplement the remarks.

MR. FURTADO: The question is: Is the contracts that the American Government has with private companies, for instance, when the American Government buys planes, or something like that, do they require a parallel apprentice training program in those companies?

Mr. MIRENGOFF: Yes, the answer is that there is not generally a specific requirement for training in the specifications of the contracts that the Government lets to private bidders, private contractors. There is, however, a recognition that in many instances such training is necessary. Any company that bids on a Government contract may include in its price for that contract the cost of the training that would be involved.

As a matter of fact, the training that is proposed in many areas is subject to careful scrutiny by the procuring Government agency to be sure that the training is adequate to meet the standards that are set.

Now, let me go a step further and say there are under consideration proposals to stimulate additional training, that the Government should require specific training program to be incorporated in various procurement contracts.

As a matter of fact, this suggestion is being made in an attempt to not only encourage additional training, but to encourage companies to employ the less-qualified handicapped persons in their establishments. The Government would be prepared to underwrite those additional costs which result from the efforts to train such persons. In summary, although training in Government contracts is reimbursed, it is not a hard and fast requirement, but there is interest in using this great lever, this great capability of Government contracts as a means of encouraging and extending training programs.

There are one or there are two other aspects, I think to your question. Lew, do you want to take a crack at them?

MR. EARL: The other aspects were with respect—as I understood them—to the cooperation of educators and the labor movement in carrying out some of these training programs.

I can see, from some of the discussions that we have had, that many of the developments in our training programs in the last 5 to 10 years have been very confusing. There is a great deal of cooperation between the educators and the trade union movement in developing all these programs at the local level.

This will vary with the program and it will also vary a great deal with the locality. THE MDTA programs for training people both in institutional type, and on-the-job training, involve the education fraternity, the vocational education schools, the Department of Health, Education and Welfare, through the Office of Education, and very much the local community.

There is a great deal of collaboration at the local level and we are encouraging much more of it. Nothing has been said here so far about our comprehensive area manpower planning system which is an effort to force local communities and local areas to do coordinated planning. Through that program, which is commonly known as CAMPS, we have also begun forcing the Federal agencies to get out and talk about coordinated planning at all of our training programs to meet training needs at all levels, regional, state and local.

We are not satisfied that we have accomplished all we want to in this area, but Mr. Wilson could have added to his list a trend toward better coordination of all training programs with the cooperation of everyone.

MR. MIRENGOFF: Thank you Lew. Does this answer the question?

MR. FURTADO: Yes.

MR. MIRENGOFF: All right. We will now proceed to address ourselves to a number of questions that have been sent up in writing.

The first two questions are addressed to Mr. Lesniok. I will simply state the question and let Mr. Lesniok address himself to them.

The first is: "How many skilled and apprenticable trades are included in your union?" And the second question is: "How do the trade unions handle their internal affairs regarding the educational aspects of training relationships with management and government educational agencies? Do they have advisors? Do they specialize for their own people?"

MR. LESNIOK: I will take the first question of how many skilled apprenticable trades are included in your union. As I said we are an industrial union. We represent people within industry and not the construction field. So there are 87 trades involved within the IUE structure. This is strictly the IUE structure and not another industrial union's structure.

How do trade unions handle their internal affairs regarding the educational aspects of training relationships with management, government's educational agencies? Do they have advisors? Do they specialize their own people?

Yes, Dr. Romero, we in the IUE do have advisors. In the official capacity of being in a governmental agency—no. But you must understand that in this state, the State of Ohio, there is a State Council of Apprenticeship and our international representative has a seat on that Council which involves management, union and education. In that capacity we do have an advisor. We are involved in the AIC activities within the city, in an advisory capacity. So we have advisors there. We are a professional organization. We like to consider ourselves one; so, therefore, we do specialize. These people primarily working within the skilled trades group versus those within the educational department. I would like to point out that we have a mobile educational department that travels between Florida and Ohio to educate not only our own membership, but whoever else may be interested at a given time, including management. This is a dire need at times, we feel.

MR. MIRENGOFF: Thank both of you.

The next question is directed to Mr. Bowerman and I guess it is really a two-part question. First: "How many ASTD Members are there in Latin American Countries? Are there any chapters in Latin America? And, can the ASTD service them in Spanish or Portuguese?"

MR. BOWERMAN: When Mr. Mirengoff introduced me, he stated that I was the Public and Member Relations Director for ASTD as well as the Manager of Commercial Services. I would like to go back to a couple of points that I made in my presentation to clarify that. One of them was, because of my interest in member relations I would like to see membership and participation in ASTD grow to include every individual in any country for whom the Society is capable of providing worthwhile benefits and services.

Finally, I said, as the frontiers in training and development are reached, we are prepared to move forward to cross them. If some of these frontiers develop in your countries we hope we can work with you to the common good of our profession, our people and our countries.

However, ASTD is certainly interested in both of those things. Off-hand I would say there are a couple of hundred ASTD members in Latin American countries. I know there have been that many who have attended our institutes, who have attended our national conference and other programs. As part of these programs they have been exposed to membership and membership has been tied in with attendance at the institute and attendance at the national conference.

We have 70 chapters in this country, two overseas, but none in Central or South America. However, there is no reasons why there cannot be. If we establish and charter South American or Central American Chapters, the members would benefit in the same way that members in the continental United States and Canada benefit from our Association. There is no difference. There would be no difference in the membership benefits and services.

Could ASTD service these members in Central and South America in the Spanish and Portuguese languages?

At the present time we cannot. However, as our membership grows in these countries, as we have more members and as we establish chapters, most certainly we will have to provide our materials in your languages in order to provide you the same benefits that we are providing North American members. That is something that will come about in the future as our membership grows in your countries. Does that answer the question?

MR. MIRENGOFF: Thank you. And now for Mr. Burkett there have been several questions posed. Two from Dr. Romero of Peru who asks: "Would it be convenient to try to create chapters of the AVA in the Latin American Republics; and would CINTERFOR be a proper agency to accomplish this?" Then a question from Mr. Guevara who asks in effect, are there any differences between the American Vocational Association and the ASTD?

MR. BURKETT: I will attempt to answer the questions that have been raised by Dr. Romero first. His question is: "Would it be convenient to try to create chapters of the AVA in the Latin American Republic?"

As I stated to the group here, one of the objectives, of course, of the Association is to work internationally. Certainly we would welcome the establishment of chapters in any country throughout the world. In fact we currently have chapters in Canada, in the Philippines and the the Republic of Turkey and would welcome chapters in any of the Latin American countries. We would assist the Latin American countries in the establishment of these chapters and have staff time that could be given to this purpose.

We feel that CINTERFOR itself should be the group through which we work, and working closely with CINTERFOR we could establish these chapters.

I might say that currently we have 72 chapters in the United States and in other nations throughout the world.

The next question was concerning the differences or the similarities between ASTD and AVA.

It occurred to me, as I was up here attempting to explain the program of the American Vocational Association, that perhaps I was saying approximately or about the same thing the gentleman from ASTD was saying. I think that there is a considerable similarity between the types of things we are doing and there is cooperation. In fact, I think many of the vocational people are also members of ASTD; the membership of the two organizations are overlapping to a certain extent, but they are somewhat different.

The training directors or the ASTD is addressing itself to the professional problems, professional matters with which the training directors, mostly I think within industry, are concerned.

We are addressing ourselves primarily to the public sector, to the public educators in the public sector.

There is a similarity between the two organizations as far as work is concerned, but the audience to which we address ourselves is somewhat different.

Thank you.

MR. MIRENGOFF: Thank you.

INTERPRETER: Sir, there is another question.

You do know that the American Government, besides being the greatest contractor of private industry, more and more is becoming itself the greatest industrial producer. To insure the constant progress of the different sectors and to give more relevance to technology, I would like to ask if this trend in the economic field will not also force the same trend in the educational system to pay obedience to national objectives specifically defined.

MR. MIRENGOFF: I am not quite sure that I got the full impact of the question. The questioner stated that the United States is increasingly becoming a larger and larger producer in its own right.

This is, I think, true only in a particular context. I don't think it is accurate to say that the United States Government directly is becoming involved in more and more of the production and direct services activities of the country. What is, however, quite true, is that if one looks at the growth of employment in the United States, it is true that the government sector—and by that I mean not only the Federal Government, but even more importantly the State and local governments are becoming larger and larger. Which means that the growth in employment terms is more heavily in the government sector than perhaps any industry. This refers to our school system and our other governmental services.

In this context it is quite true that the Government is becoming a larger and larger force in the economy. Employment in the public sector is growing.

You are quite correct. The question properly stated is: Does this great growth and expansion from the public sector have an impact upon the educational—and I presume the training system? I think here the answer is clearly yes.

The answer is yes because the whole trust of our training programs, in this country at least, is predicated upon the proposition that we ought to be training for where the needs are. We ought to be training primarily for the expanding sectors of our economy. There is no point in training people to manufacture buggy whips when we no longer are using the horse and buggy.

Educational institutions will have to address themselves to re-examining their training programs to see whether they are responsive to the needs of today and not of yesterday. There is no point in, for example, using most of your training resources for occupations that have become obsolete, or that are declining. I think the Vocational Education Act of 1963 was a recognition of the importance of this new look, this re-evaluation, this re-assessment, and was an attempt to move the entire vocational education system more and more closely to the realities of the present day.

Are we through with the questions? Let me invite you all to raise any questions from your seat orally that you may be inclined to want answered.

Yes, sir.

MR. MOLINA: I would like to ask a question of a general type. This question has its inception more or less in this type of professional training in this country and also it is based on the fact that in Costa Rica the National Institute of Training, which is a semi-autonomous institution, by legal decree has the responsibility of professional training, both in the public and in the private sector.

This is an institution that centralizes or concentrates all of its efforts with the aim of having a desirable systemization and uniformity of effort. Even in those cases where professional training is beyond its jurisdiction—for example in the case of the professional colleges that are dependent on the ministry of education—even in these cases, it attempts to coordinate the efforts, with regard to organization, to avoid duplication of efforts.

I think that this is possible or is feasible because of the smallness of our countries, but in bigger countries like Columbia, Peru, and Brazil, the institutions that take charge of these things act in a similar way.

Now, according to what one of the speakers mentioned here, in the United States, professional training and education is primarily in charge of local boards—is the responsibility of local boards of education.

Now, my question is: What type of institutional forces or legal forces are there to unify all of the efforts to avoid duplication? What effort is there in the Federal Government? Is the National Manpower Act a sufficiently efficient instrument to accomplish this unification of efforts?

MR. MIRENGOFF: Yes, thank you. I think this question is similar to one that was asked earlier. The speaker alluded to the fact that in Costa Rica, as well as some of the larger countries in Latin America, it has been possible to systemize and coordinate training programs; whereas in our country, as alluded to by several speakers, we do not have this coordination either in education or in training. He referred to the comments made, I think, by Mr. Wilson, describing the hundreds and indeed thousands of independent local school boards throughout the country.

The question is: What efforts have been made under our various manpower and other administrative acts to bring about this kind of coordination or systemization?

Do we have a volunteer for this one?

I wonder if I could ask Mr. Burkett to say a word on at least the problems of coordinating or trying to coordinate and systemize at the vocational level, through our local and state systems.

When he is through discussing the educational problems involving coordination, we will address ourselves to how we try to systemize the training programs.

MR. BURKETT: Education traditionally in the United States is a function of the local community with assistance given by the State and Federal Government.

Really, the first Federal legislation that was ever established on education in this country that had a Federal, State, local partnership was the Vocational or the Smith-Hughes Act of 1917. The Federal effort of course is centered in the Department of Health, Education and Welfare. The coordination is done there.

The United States Office of Education has the responsibility for administering the Federal grants to the states for vocational education.

The state makes a contract with the Office of Education to receive these funds by providing a state plan of operation of vocational education.

The state in turn receives requests from local school boards for funds to be utilized in training programs. This has proven very successful from the school standpoint in getting some semblance of vocational coordination from the local schools through the state to the Federal Government.

Of course, we have other problems as they relate to coordination with other programs that utilize the services of the public schools. We provide much of the institutional phase of the Manpower Development and Training Act; that is, coordination with other agencies rather than coordination within the education system of this country.

MR. MIRENGOFF: Thank you. I think you really answered both parts of the question.

I would very much like to continue this discussion but I have been advised by both my American and Latin American bosses that we have run quite a bit past our closing time. I will forego the summary that I had planned to make and just close this session by expressing our appreciation and my thanks to you, the members of the delegations, and to you, the members of the panels, for what I consider to be a very stimulating and constructive session. And I trust your other sessions have been equally intriguing.

Thank you very much. Good afternoon.

(The meeting adjourned at 1:00 o'clock p.m.)

PROCEEDINGS

September 11, 1968
Evening Session

DR. FAULDS: I would like to invite Mr. de Carvalho, the Director of CINTERFOR, to say a few words, as representative of this organization.

MR. de CARVALHO: Ladies and gentlemen, I wish to express my great appreciation to be here tonight in this City of Cleveland, which is quite famous for all its achievements in the cultural and artistic field.

During these few days of our stay in Cleveland, this city has also shown us a tremendous industrial potential. It has justified being chosen for us as a center for observation of the trends in training and development in the United States. This has been the main goal of this seminar, which we are closing tonight.

It has been a very friendly session, this last one, and we must express our gratitude to the Chamber of Commerce of this city, which has shown its feelings of fraternity and brotherhood, and we assure them that we do take with us from our hosts, from this city, from the power of this city and from the realizations and the potential of this city, the best of the memories.

I want to take this occasion to express publicly my gratitude to AID and to the Department of Labor of the United States for having offered us this seminar and for having selected the International Manpower Institute for the organization and coordination of this seminar.

I want to congratulate them and to express my gratitude to Mr. McVoy and to the group of gentlemen who have worked with him for their efficient job.

I also want to take this opportunity to express my recognition for the support given to us by the group of experts who have given us their knowledge and their experience in their various fields of activities, and have participated as members of the panels in our sessions.

I want to mention the four names of the presidents of the panels; Mr. Robert Culbertson, Mr. John P. Walsh, Mr. Karl Kunze and Mr. William Mirengoff.

To all of the members of the panels, I want to express our appreciation for their wonderful cooperation.

The quality of the presentation and comments of the members of the panels have allowed us to have a very clear picture of the organization and programming of vocational education and training in the United States. This information has been presented in a very objective manner, and the assistance given by the Federal Government, the State Government and the local governments has been explained. Also we have received information about the participation of the private sector and the labor groups.

The information that we have received will be quite useful to us in determining our problems and also establishing the perspective for the future. We hope that the interest in this type of direct communication will be maintained and kept through an intensive exchange of ideas and experience.

We will be most grateful if all the research organizations as well as those engaged in different programs, whether they are in the public sector or the private sector, will provide us with all possible information about their activities, periodically, so we can become a means of communication to channel this information to the professions and institutions of Latin America.

We hope to reciprocate, in the future, for the cordial hospitality given us in this city.

We hope you can come soon to tell us of the success you have achieved in the new stages of progress that you are following with so much strength and impetus. I hope that all of us can continue to work together, joined in our common goal, which is the integral development of the human resources of our respective countries.

Thank you very much, ladies and gentlemen.

(Applause.)

DR. FAULDS: Thank you very much for your kind words.

I would like to call on next, Mr. Darwin Bell, the Deputy Assistant Secretary of Labor for the International Sector.

Darwin Bell.

MR. BELL: Ladies and gentlemen, delegates, now you will have to put your earphones on because I am going to speak in English.

I am used to speaking in English, and my Spanish is so bad that I had better speak in English.

I might be a little more comfortable in English, but I don't know that I'll ever feel comfortable speaking.

In reality, to get together with all of you tonight is an extremely high point in pleasure for me and for the rest of my colleagues, I assure you.

We've had an opportunity of getting together with you, exchanging ideas and listening to some people who have spent a good part of their lives in gaining experience and putting this experience to work in the professions that have been, I hope, helpful to all of you.

The one thing we have to remember in these times of tribulation and troubles is that the reason we're here together has nothing to do with country borders, with sit-ins, with strikes, with elections, with tariffs. The thing we are talking about is common across all borders.

We're speaking of things that are basic to all of our countries, to our continent.

We are speaking of things that are of deep, basic interest to all of us.

It's true, within each of our countries, we have a somewhat different system of government. We have a different system of election, different terms of office for our president, for our senators and for our lawmakers.

The thing we're here for and have been talking about is most basic, that we are first of all people.

The responsibility of the various elements of governments or quasi-governments that you represent and that I represent is to present the best method for employees to move up in life and in responsibility.

The thing we are looking for in common is a manner of taking the biggest raw material we have–people–and training them to the point of their satisfaction and the satisfaction of our country.

When we are looking for methods to select and train people, this is getting at the basic, natural resource that our countries have in common.

In some countries we have gold, in some countries we have iron ore, and in other countries we have an excess of electricity.

All of these natural resources are fine, but they are worth nothing without the people, and the people are worth little without proper stimulation, development and training.

Therefore, I get rather serious when I attend conferences like this, because it is basic to our forms of government and our forms of life. I take a great deal of pleasure and pride in being associated with a group, such as yours, that has done so much and will do so much in the future to continue to develop our countries.

Refining this just a bit more, in each of your countries your organization may be under a slightly different unit within the government. In our country, as you know, this is handled partially in the Department of Labor, partially in the ministry or Department of Education and partially in a special organization called "Office of Economic Opportunity."

In various of your countries, it will be under the Ministry de Trabajo, or in the Ministry of Education. The essential point that I keep coming back to is that wherever the entity the development of people lies within the government, all of you must work to build it up.

The OAS, the ILO and AID are mechanisms to give us tools to refine the development and training of manpower, of people.

In some cases, it is working directly with unions, but ultimately working with people.

To hear of the progress that is taking place in the interchange of ideas to me is fantastic.

I wish to thank, first of all, the City of Cleveland, for being host to us, for providing the opportunity to get together in this city, as my good friend Dr. Carvalho has said, and secondly, the Chamber of Commerce and the business organizations here for providing the support, stimulation, guidance and mobile assistance to make this conference possible.

Within the Department of Labor, we have a number of people working very hard. Dr. McVoy has headed up the group that has made this possible. Ray Brown, Dr. Vincent Faulds, Barbara, the secretaries that have worked to knit this organization together, I'm sure we all appreciate their support and cooperation.

I hope that future conferences can be as successful as this one has been and I hope that the Department of State, AID, here in the United States, will know, as I will surely tell them that we in the Department of Labor have gained much satisfaction in working with you.

I say to all of you, thank you very much for coming. It's been a pleasure to be a part of hosting this organization.

Thank you very much.

(Applause.)

DR. FAULDS: Thank you, Darwin.

I would like to introduce at this time a representative of the participants at the seminar-conference to say a few words on behalf of those who have had to listen to all of us and put up with all of the things that we have planned.

Senor Fernando Romero, representative of the delegates at the conference.

(Applause.)

DR. ROMERO: Thank you so much.

I can't keep from you, ladies and gentleman, the great pleasure that I have in being able to address you at this meeting.

During the last three days, we have been subjected, so to speak, to so tight a schedule, so full a program, that it has been impossible for us to express the feelings that come from within.

For that reason I am quite pleased for this opportunity to speak on behalf of my colleagues. I am grateful to them to have selected me as the spokesman for all of the representatives. It would not have been so pleasant if I though that I was chosen because of my age. Until now we have participated in this conference only from a technical point of view. Now I would like to say something about our feelings.

I would like to impart to you the value of the good fellowship which has been generated during these three days. We have felt the spirit of friendship and cooperation from all. Even our charming interpreter, while coping with the involved and intricate lectures of the experts, never lost her poise nor her warm smile. We feel that we have all made friends.

I think, first of all, that I reflect the feelings of all of my friends when I express our deep-felt gratitude for the work that has been done and for the success of this work, thanks to the efforts of Mr. Carvalho, whom we all admire, respect and support in this important task in Latin America, CINTERFOR.

To him and to his collaborators, we want to express our appreciation for the organization and development of this seminar.

(Applause)

I also want to express something very special about our situation as guests of this country.

First of all, I want to express my feelings not on behalf of my friends, but as an individual.

Twenty-five years ago, it was not during the time of George Washington, as you might think, I stayed in this country for a long time. My headquarters was Washington, D.C., and I had the opportunity to travel a great deal during that time. My stay in the United States allowed me to see phases and factors of this country which, unfortunately, cannot be reached or perceived by persons who come for a very short stay, for a very quick trip.

I really lived with the people of the United States. I had the opportunity to enjoy the warmth and simplicity of these people.

I have four daughters. They are all women now. I have only mothers in my family. My four daughters studied in the United States and developed some of the qualities and characteristics here. In some cases they are problems for me, particularly when their husbands turn to me and say, "Your daughters have a sense of democracy and freedom that has nothing to do with the Latin American system."

During that period, I must be fair and truthful, I developed in this country quite a fund of knowledge and understanding that has stood me in good stead as I go through life. This has helped me realize the difficulties one must face in the field of human resources in human relations. Here I spoke to people in all walks of life. I cannot forget when Mr. Cornelius Vanderbilt told me he was going to Latin America, and very innocently I said, "Which ship are you taking?" "I am taking my own ship," he replied. I also talked to workers. I talked to teachers and from all of them I received the most wonderful, the most valuable lesson in living. For that reason, I will always have the greatest respect and the greatest love for the United States.

Besides these personal remarks, I think I must express some thoughts which may be unnecessary within the limited circle of friends that are present here.

Some of us will not agree with various phases of the foreign policy of the United States. Some perhaps may have other criticisms for one reason or another. However, it is necessary to say that from the viewpoint of those of us who are interested in education, this is a country which is an example and a country which deserves to be imitated.

In this country three centuries ago, when education was the privilege of only the highest stratum of European society, the pioneer and the immigrant who came here created, along with the development of natural resources, an educational system which was in their opinion essential for the development of the country.

Here, when the republic was established, they understood that democracy and representation by the people would be meaningless where there was ignorance. Within a representative and republican system, a citizen can only vote intelligently when he knows and understands what the issues are.

Here they understood that education was essential. It was a value which was beneficial to the leaders of the new world.

Many Latin Americans do not know, and many North Americans do not know that half a century ago, when countries in Europe were still fighting to obtain universal suffrage and to create trade unions and to defend the rights of the proletariat, the United States had already made great strides in these fields.

At that time, there was a man whose name was almost forgotten, Mr. Horace Mann, Secretary of State of the State of Massachusetts, who made the people understand that raising pigs was not more important than education. He said that education is an investment that will benefit the human race. It is because these stages were established early in the United States that education in this country is something unique in the world.

Education is not a concept that comes from the head down. It goes from the heart up to the mind, to the head.

Education is a tree that has deep roots in the soil where it grows and it has to absorb the nitrogen and the oxygen of the air that you breathe and that surrounds you.

Education is something that is part of the concept of the geophysical reality of what a country is.

If one thing has been proven in this seminar, something that we can learn from this seminar, it is the fact that in this country, education is not a structure, it is not a goal, it is not a program and it is not a budget.

Education is something living. It is something you breathe in the air of the United States and which has made the greatness of this country.

I want to refer, simply, to the recent studies of Schulz which showed that physical capital has been less in the last 7 years than the investment in education. This means that it was the educational effort and not the physical productive effort, and I apologize to the industrialists here present, but it has been investment in brains and intelligence which has made the greatness of this country.

Perhaps we do not agree; there is some conflict in the educational policies.

Some of us find it too pragmatic, some of us find it too trivial in a way, but it doesn't make any difference.

Let us consider education as a trend and as a trend, what we saw in the United States is something to be admired.

Let us consider the facts. At the present time the United States has about 35,000,000 adults who are taking different courses.

Let us consider that the United States has a university population which is larger than the university population of the whole of Europe, with the exception of the Soviet Union.

Let us listen to what we have heard here. The industrialists, the trade unions, the teachers, each and every one of the individuals who make up America's society do make a contribution to education.

Let us consider that there are questions, sometimes, that are absurd confronting the educational reality of the United States.

It is not a system handed down. It is an organization that goes to the people in the country. It is a system that comes from the people, from the community and that projects its trends to the rest of the structure.

Perhaps the United States might improve its approach to the educational system, but we must respect the fact that the country aspires to educated people.

For all of this, it is perhaps a duty to express our homage and our admiration for this country and we are doing it with all frankness and with all humility.

We also want to express our gratitude to the people who have made possible our meetings and have given us this opportunity to discuss the educational aspects of the United States.

I must say that some of the lectures were boring but in spite of that, there were very interesting speakers.

We can draw ideas from them.

To the Labor Department, I must say that they were not only working soulfully, but also have extended its action and its very fruitful banner to the Latin American countries.

I hope that in all of the countries they have done the same thing that they have done in our country, to organize institutions that are very productive through the cooperation of the Labor Department.

I also want to express my gratitude to the State Department, to the present public educational institutions, to all of the persons who have contributed to this seminar.

Also, thanks to all this beautiful area of *O he o,* not Ohio, where we all have a new capital city. My country has a capital here–Lima, Ohio, and Valparaiso. Two cities that are paying tribute to the cities of our country.

I also want to tell you an anecdote of the General Counsel of Peru, who had wanted to spend a vacation in Lima, Ohio, so he sent a cable to the Mayor of the City of Lima, saying that he was coming. He was warmly received.

The Mayor took him to City Hall and when he started his speech he said: "Ladies and gentlemen, we have here the great honor to receive or to meet the first citizen from the city which has taken its name from ours."

In this new encounter with Ohio, we have had very pleasant surprises.

It has been much greater than seeing the zero gravity of the tunnel of NASA, to see the production of the different factories.

The most important thing to me is to find something here which we have been using for 40 years in my country and I didn't know that it came from here, and that's the Yale Lock.

This gentleman here told me that it comes from here.

For all of these surprises, I must say that our visit was very pleasant and we want to give thanks for the hospitality of all the citizens of Cleveland, and Ohio, and as Mr. Carvalho says, we do hope to have the opportunity in Lima or Valparaiso or the different capitals in Latin America that have acquired their names from

American cities to tell of the attentions that we have received from you.

(Applause.)

DR. FAULDS: It's a little difficult to have anything to say, following a grand speaker like Dr. Romero.

I only hope as a member of the team representing the United States that we can live up to the reputation that he has established for us.

This is a very great task that we have.

I'm not supposed to be on the program, but I would like to take this opportunity to give my thanks to all of the many people who have had a hand in whatever success the seminar may have had.

The private sector represented first by the Aristotle Group, and their displays in the field of educational training, and most recently, here in Cleveland by the companies whom we have visited and our host tonight. I would also like to recognize the members of the team with whom I have had the opportunity to work: Mr. Hood, who is Executive Secretary of the Planning Group; our distinguished translators who have, I think, done a marvelous job and we hope will continue for the next two days to do the same.

Mr. Harris, our electronics man, who is responsible for the success, not any failures, we have had in the sound and all of the other members, especially my good friends from CINTERFOR, and I hope my friends from the other countries who are represented here.

At this time, I would like to introduce our host for this evening, as the final speaker and official representative of the private sector in Cleveland, Mr. Clifford Thornton, Vice President of Eaton, Yale and Towne, who I hope will say a few words to us tonight in response to this group and will terminate our segment of the meeting here. As of tomorrow, Eduardo and the CINTERFOR Group will be responsible for the rest of it.

He said to remind you, tomorrow at nine, not at ten.

(Laughter.)

MR. THORNTON: Mr. Chairman and ladies and gentlemen of the seminar, I think it would be really ungracious of me at this time if I didn't respond a bit to the very nice things that were said by the previous gentleman from Peru.

It's very nice to hear these things that you have said and we do welcome the opportunity to have this fine meeting in Cleveland.

I believe, if I understand, this is the sixth meeting of this organization and the first to be held in the United States. We are really honored that it was held here in Cleveland.

Several individuals have said earlier during the refreshment period that I might give you some information about Cleveland that might not have come to your attention.

I really don't know what has come to your attention to this point but some have said, "How did it get started?" and so on.

I'm not going to be able to do as good a job as some others could do in the community, for the reason that I haven't been here too many years. This is my fourth year in the community but it's one of those types of industrial communities in which it is so easy to get acquainted.

My wife said about six months after we were here that "I don't know what it is but I just feel comfortable here."

That is the way the people in Cleveland make you feel when you are living as a part of this community

The reason why I say that is that my home state was—and I always have to get this in—Texans are always accused of it, so I'll just say, "I'm from Texas."

And my children grew up in the mid-west, in Chicago, and this is where they count home. We were there about 18 years with an international company, in the mining and chemical industry and then we moved to New York with Yale and Towne. When Eaton Manufacturing Company and Yale and Towne Manufacturing Company came together in a merger, the headquarters of the company was placed here and this is the international headquarters of our company.

Eaton was already here. We moved out from New York. This accounts for my being here only a relatively short length of time.

I inquired, myself, concerning the background of this community and you might be interested in this. From a population-point-of-view, we are about 1,800,000 plus at the moment in the greater Cleveland area. About half of that, somewhere between 850 and 900 thousand is in the City of Cleveland itself. The suburban area, immediately adjacent, provides the other half.

We do have some of the problems in this city that most cities in the country are having at this moment. The innercity grew first and it has presented some problems. Not a problem because it was the first to grow, but because the city spread out and in a sense grew away from that area. We are beginning to try to find ways and means to properly come back together and rebuild some of our innercity.

If you haven't had a chance to get into the suburban areas, you might find occasion to do this, because, generally speaking, some of our universities, while they are here in the city, their life and campuses are in the suburban areas.

Culturally, Cleveland, you might say, was tied to New England and the original States along the Atlantic and in the north.

Some of you may have seen the signs "Western Reserve." The words "Western Reserve" are around town on one place or another.

I inquired as to what this meant and was told that this was originally the western part of the country, was the western reserve province, western reserve section of the Province of Connecticut.

The grants were made in this area, on the western reserve, for the soldiers of the American Revolutionary War; therefore, they brought their educational interests and habits with them.

They have stayed. This city, as you may have read recently, has one of the outstanding musical organizations in the world, the symphony orchestra. The Cleveland Orchestra is well-known around the world.

Our art museum and other museums, but particularly the art museum, have collections that are only surpassed in this country by some of those of the Metropolitan Museum in New York, and we are a very close second, at that.

The thing that perhaps may interest you more is that Cleveland got its start in the early days as an industrial area. You may have noted along the lake that we still have many plants mixed in with the downtown area.

Some have asked, and I had the same idea when I came here, why didn't we beautify the lake and so on, but the city really started as an industrial area and they built places around it and gradually out and out. This has created all the jobs and many other things and it has been good for Cleveland and the State of Ohio.

Some of it now is unsightly, some old, and in time, it will be moved out. The economics of the industry itself will determine this sort of thing.

We are proud of the industry in Cleveland, because that is what it is.

The automobile industry in this country got started here in Cleveland, for example, and it still is one of the largest producers of automobiles in the State of Ohio and the United States. For example, the majority of the basic components that go into the automobile, truck and aircraft industry are made here in Cleveland and many of the early car builders had their headquarters and manufacturing units here in Cleveland.

Some years later, a number of the assembly plants moved to the Detroit area, for one reason or another. The Cleveland area still supplies Detroit with basic products that are produced in companies here. These are primarily self-engineered, heavy duty components for the truck and transport and automobile industry. The people in Detroit do a masterful job of making designs around them and we, in this area, including my own company, feel like we are quite an extension, providing the original engineering for many of the innovations and basic products of the automobile industry.

These are just some highlights. I did not attempt to bring along information to show our company off. I did, however, have placed at your tables a copy of the last issue, the August-September issue, of Eaton, Yale and Towne News.

Some said to me, "Well, this is about Mexico."

The reason is that some of our people were recently in Mexico (I was there at those facilities, myself, in July) and this is a salute to the employees, to the investors and to those who are producing Eaton products in Mexico. We are tying that in with our salute to Mexico for being host to the Olympics this year. As a matter of fact, here in Cleveland on Friday evening, the honored Ambassador from Mexico will be our guest, among others, concerning Mexico's hosting of the Olympics.

A number of our Officers will be at the Olympics and that would be a good time for all of us to gather down there, wouldn't it? It's such a wonderful place and a wonderful climate.

If we can manage it on the expense account, it would be all the more wonderful, wouldn't it?

(Laughter.)

Concerning your meeting and your favoring Cleveland with your seminar, I would like to say that it's nice to hear that so many things have been done reasonably well in the United States but it is also true that in our growing up we have experienced some set-backs in certain areas. In certain areas we have not made the progress that we would like to have made. I'd like to just touch on that briefly this evening in these the closing remarks of your seminar as was indicated a moment ago.

Learning of the successes in skill training and the problem of full employment in Central and South America, as well as Canada, in a meeting like this makes me feel very modest about the gains we have made in this country.

To be honest, we permitted the matter of skill-training and job placement to go unsolved for too many years in many instances. The result, as is perhaps widely known, was high unemployment among our minority population.

Only recently have serious efforts been made to correct it. The results have not been startling but what progress we have made is encouraging. Let me give you some specific examples of work being done right here in the City of Cleveland, in these regards.

A promising example of teamwork between business, industry and other sectors of the community is Cleveland now.

Cleveland, you may have already discovered, has a multimillion dollar project, about $177,000,000, to be exact.

Describing Cleveland's program, the editor, Mr. Thomas Fahle, of the Plain Dealer, recently wrote this: "What is unique is that our business community is participating personally and financially in Cleveland's new era, in a remarkably agressive way."

While Cleveland now centers around urban renewal activities, portions of the plan are related to the problem of full employment.

The start-up of small business enterprises is being encouraged by formation of a money pool to provide loans and finance programs of technical and business management assistance.

A new building program will start soon that will create several thousands of new jobs.

Children's day care centers will be established for many mothers on welfare to seek jobs.

Some of our successful workshops have already been sponsored by the program, drawing thousands of inner-city residents as participants and stimulating their interests in learning and their desire to remain in school.

A brief status report shows that after only a few months of activity, there are promising results showing.

Most of the two-year cash goal from the public and from business and industry has already been collected or pledged.

These local funds I am referring to now are the seed money to trigger the greater contribution from our Federal Government. I think the Federal Government, in their approach, is certainly wise. When you have local personal participation and financial participation, it will more or less insure that dedicated people with commitments (if you commit your finances, you commit yourself) will make this local program work and accomplish its objectives.

A screening committee has been formed. It is headed by a loan executive from business, all these people are from business. This committee will establish priorities and allocate the funds to get the specific projects going and going soon.

The Manpower Planning and Development Commission here in Cleveland is a nonprofit, community-wide organization which has sought, with a good measure of success, to bring together the various elements of the community, business, industry, education, labor, government, minority and welfare organizations.

The purpose is to use their thinking and resources on ways of reducing or preventing unemployment or sub-employment.

According to recent attendance rosters, the largest single group involved is business. This is not to discount the vital and enthusiastic participation of others, it only points out the fact that business has much to gain and much to contribute in a program which develops untapped sources of manpower for employment.

Broadly, the Commission exists to define local manpower problems, formulate objectives, establish priorities and come up with solutions to promote their implementation and evaluate the program.

Since 1962, achievement of these goals has become more challenging than ever. That was the year in which, with the advent of the Manpower Development and Training Act, the Federal Government acknowledged its own responsibility in the area and provided the stipends to train the jobless in shortage skills.

The programs originally skimmed the cream from the jobless roles and reported relatively good success.

At this point it was discovered that to make further progress, skilled training alone was not sufficient to make the remaining jobless employable.

When we think about this question of the jobless and those who some have said are unemployable, for example, how do you motivate a person when he has never seen his father get up in the morning and go off to work?

To bring such a person back into the mainstream of productive society goes far beyond the provision of basic skill training. It requires, also, the resources of social agencies, local government, business and educational institutions.

It leads to concentrated employment programs such as Cleveland's own AIM jobs. A-I-M, which you may have heard about, also requires the financial incentives from Government to industry, made available through the President's Job Program.

We are encouraged by the results here in Cleveland today. There are 22 manpower programs in existence in this community at the moment.

These special programs served 10,000 persons last year, and over 3,000 of these were placed in jobs. These people went through various training processes and many of them are still in it.

In my opinion, Cleveland is not behind with respect to jobs for the hard-core unemployed, not nearly as much as many people might think.

I have lived and worked in New York and Chicago, and I really think that in this particular community, basically industrially oriented as it is, we are doing a reasonable job at this stage.

Complimenting this effort is the National Alliance of Businessmen, which is one of the special manpower programs and has as its objective, as you may know, to provide 500,000 jobs nationally for the hard-core unemployed in the next three years.

Twelve thousand of these jobs are to be provided here in Cleveland.

In a period of a few months Cleveland's NAB program has received pledges from some 80 companies of over 3,000 jobs for these hard-core people to be trained and given skills that will put them in the mainstream.

All these firms, under the provision of the program, were eligible for reimbursement from the Federal Government. However, only 12, representing some 800 of the jobs, did in fact apply for reimbursement.

This means that the others will absorb the training and other costs themselves, as part of their own operating expenses, and this is what we are doing in our own company.

Eaton, Yale and Towne is among several companies in this city who have begun to take our social responsibilities seriously.

Some of these companies, I must say, have more ambitious programs than even our own at this time.

We, in our company, are conscious that there is a new trend, not only for corporate involvement in urban affairs among management, but also of increasing shareholder interest.

We are impressed that we in management can contribute substantially to betterment in urban affairs.

We can provide jobs for hard-core people and we can be supported in this by our stockholders.

In our own company, for the first time this year, we included a section on corporate citizenship in our annual reports to shareholders. Part of this was concerned with taking an active interest in civic and welfare projects. This concern, of course, encompasses job training.

Our involvement in skills training locally, through the Manpower Planning and Development Commission, is a valuable background for us as a company, as we become increasingly an international company.

Keeping in mind our guests tonight, and I have met a number of you from various countries, I should mention that we have manufacturing plants in Argentina, Brazil, Canada, Columbia, Mexico and Venezuela.

These operations are described on Page 35 of this booklet that you have in front of you, at your plates. I would like to read a couple of paragraphs on Page 35. If you would like to turn to that page, you can read them with me.

Beginning with the second paragraph, at the top of that page.

It says: "In 1958, the Company had limited manufacturing abroad. Overseas sales were less than $100,000. Today, its Canadian and other foreign plants number over 45.

They contribute more than $160,000,000 in sales, or about 22 percent of the total volume of our company.

The licensing program, which a decade ago consisted of a few in Europe, has, as well, spread up and out in every direction.

Eaton, Yale and Towne's own projections brought out the fact that the green years are still ahead in world commerce.

By 1971, sales of the Canadian and overseas plants, that is, those that are outside the borders of the continental United States, are expected to approach the $350,000,000 level or approximately 27 percent of our sales."

Someone asked me to make some comment concerning the company. As you know, this is our international headquarters. The question is, "Why Cleveland, why not the East Coast, or some other place?"

Cleveland is somewhat in the center of our plants in the United States and Canada, and we can travel by jet today from here to many places in the U.S. and overseas. This is a good place in our business, considering our markets, our plants and our locations, to have our international headquarters.

We have a little over 3,000 products in total, made by the company and 40,000 employees scattered throughout the world.

I think we can say that in our international overseas operations outside the continental United States, we must give much credit to the public education system, the technical schools, the universities in the countries in which we operate. Among 12 000 people working in our company outside the United States there are less than 20 people who are United States citizens.

What is quite striking, in many of these facilities, is the age of the operating management personnel. So many are very young. There are general managers in their early 30's, generally speaking, whereas here in the States, a man might be 40 years of age or older before getting an opportunity to take on such responsibility.

Within our Canadian and South American operations, we identify men of talent and invite them to work at our headquarters office here in Cleveland, and elsewhere in plants around the world.

We do not actively recruit from operations outside the United States, but we do provide the opportunity for any man in the company to go as far as his abilities will carry him.

In the countries that have fairly recently indicated a desire for greater industrial development, we have observed a double-barreled motivation among the local people who run our operations. They work hard, not only for themselves, but for the buildup of their own country, its economy, its product range, its employment of many more people in stable jobs.

You cannot beat that sort of combination to build business anywhere in this world. This strong motivation, I believe, accounts for the notable success of programs in the other Americas, dealing with, in some instances, nonliterate as well as literate segments of the population.

This is a greater success story than we have had at home in bringing these people to gainful employment.

What we have had in this country, generally, has been a lack of concern about manpower resources. We once were able to import skills easily, as was mentioned, from other countries which put us in a favorable position. This now cannot continue in a situation where our own people are not completely employed. We are having to stimulate the development in the training of our manpower right here.

Here are some of the ways that a solution is being sought.

Here in Cleveland a lathe manufacturer is training disadvantaged young people as machine operators, but what is more unique is that it is being done in the shop facilities of a local high school. However, the company pays the trainees an hourly rate and provides supervisors from the company staff.

Another company, a producer of lamps, donated a complete plant to the Cleveland Board of Public Education to use for a manufacturing training center.

A local telephone company has opened wide its doors to Negroes, with the drafting of its plans for progress. The number of skilled Negro craftsmen in this company has increased five times over two or three years, and Negro management has increased seven times.

A major producer of machine tools, here in Cleveland, has financed a complete manufacturing facility in the inner-city and local residents who work there will eventually be able to own and to operate the plant entirely on their own. This is their announced and stated intention.

I think you can see, from these examples, which are by no means all-inclusive, that we are making sincere efforts in this community to make up for lost time. We are gaining knowledge rapidly in the process.

The fact that the International Seminar of Manpower Training and Development is held in our city indicates something about our intentions and we do hope that you will be able to come back and visit with us one of these days, although we know you probably don't select the same city two years in a row.

The majority of the jobs for the unemployed are going to have to come from business. I believe prospects for success are encouraging, because there are factors in business which make its aims compatible with employment. It is compatible with the aims of business to employ an ever-increasing number of people.

We need people who are qualified and we intend to train them ourselves, with the help of our various levels of Government and private agencies.

With this great undertaking before us, we, in Cleveland, are especially appreciative of our opportunities, these few days, to exchange information with the guests and speakers attending the seminar.

Their views have refreshed our outlook and broadened our horizon.

Thank you, once again, ladies and gentlemen, for honoring us with your presence and your seminar held in our community.

It has been a pleasure meeting with you.

(Applause.)

DR. FAULDS: Thank you very much, Mr. Thornton, for a fitting climax to the fine dinner and reception we have had this evening.

I would like to take this final minute to mention some people that we have not recognized today who are the connecting link between the Washington bureaucracy that we hear so much about, and of which I am a part, and the private sector and the local people who have been so kind and so helpful here.

Mr. Webb, Area Chief of the Bureau of Apprenticeship and Training in the Cleveland area and Mr. Simon, Press Representative and Public Relations Man for the Department of Labor in this area.

We appreciate very much your providing this liaison between Washington and the public sector and private sector here in Cleveland.

As participant and spokesman for the team who worked on this, I want to thank everyone in the CINTERFOR Group, in the Cleveland group, both public and private, and also my colleagues in Washington who had a part in this. I hope that our friends and colleagues from the other Americas have derived some benefits and have enjoyed the conference, or if they haven't enjoyed the conference that they have found something in the Cleveland area that they could enjoy.

Thank you very much, and good night.

(Applause.)

(Whereupon, the meeting was then adjourned at 9:30 p.m.)

INTERAMERICAN SEMINAR ON MANPOWER TRAINING AND DEVELOPMENT

Program Outline

September 9 - 11, 1968

Cleveland, Ohio
Statler-Hilton Hotel

Monday, September 9 Morning Program 9:00 a.m. - 12:30 p.m.

9:00 a.m. Opening – Edgar C. McVoy, Director
International Manpower Institute
U.S. Department of Labor
Washington, D.C.

Objectives of Seminar

Remarks – Eduardo R. de Carvalho, Director
CINTERFOR

Education and Training Patterns for Manpower in the United States

Keynote Address – Eli Ginzberg, Director
Conservation of Human Resources
Columbia University
New York, New York

Comprehensive patterns of manpower education and training currently operational in the United States; their role and importance in the development and conservation of human resources.

Chairman – Robert E. Culbertson
Deputy Assistant Secretary of State
for Social and Civil Development
Bureau of Latin American Affairs
Department of State
Washington, D.C.

Definition of theme and objectives of panel. Introduction of keynote speaker and other panelists.

10:05 a.m. Intermission

Panelists:

10:20 a.m. Joshua Levine
Special Assistant to the Director
United States Employment Service
Bureau of Employment Security
U.S. Department of Labor
Washington, D.C.

Annex I

Monday, September 9 Morning Program (continued)

Compares current manpower and training patterns in the United States to those existin other Central and Latin American countries.

Frank Keegan, Associate Dean of Faculties
Cleveland State University
Cleveland, Ohio

Current patterns and trends in manpower education and training and their relationship to educational institutions in the United States.

James Yasinow, Training Director
Cleveland Electric Illuminating Company
Illuminating Building
Cleveland, Ohio

Typical patterns of manpower training and development currently operational within and directly sponsored by industry in the United States.

Summary by Panel Chairman, Mr. Culbertson

CINTERFOR Delegates' questions to speakers and panelists

12:30 p.m. Lunch

Monday, September 9 Afternoon Program 2:00 - 5:30 p.m.

Factors Influencing Training Patterns in the United States

2:00 p.m. Chairman – John P. Walsh, President
Dunwoody Industrial Institute
Minneapolis, Minnesota

Definition of theme and objectives of panel. Introduction of panelists. Major national political, economic and social factors which have played an important role in influencing manpower education and training in the United States.

Panelists:

Robert M. Reese, Professor of Education
and Director of Vocational Education Division
Ohio State University
Columbus, Ohio

The decentralization of educational systems and the evolution of Federal, State and local relationships to them as factors influencing current education and training patterns in the United States.

Monday, September 9 Afternoon Program (continued)

Peter Stoicoiu, Training Director
National Acme Corporation
Cleveland, Ohio

The influence of technological development and the attitudes of management and labor leaders toward education and training in the United States.

Clarence L. Eldridge, Chief
Division of International Activities
Bureau of Apprenticeship and Training
U.S. Department of Labor
Washington, D.C.

The evolution of apprenticeship and other on-the-job training in the United States and its influence on current training patterns in the United States.

3:20 p.m. Intermission

3:30 p.m. Summary by Panel Chairman, John P. Walsh

CINTERFOR Delegates' questions to panelists

Monday, September 9 Evening Program

Sponsor: An International Education and Training Development Group

6:30 p.m. Reception

7:00 p.m. Dinner

Speaker – Mr. Joseph Kane, Director of Research,
Jesuits Education Research Council;
Chairman of the Aristotle International Education and
Training Development Group.

Tuesday, September 10 Morning Program 9:00 a.m. - 12:30 p.m.

How Our Training Systems Work

9:00 a.m. Chairman – Karl R. Kunze, Manager
Training and Personnel Management
Lockheed Aircraft Corporation
Burbank, California

Definition of theme and objectives of panel. Introduction of panelists.

Tuesday, September 10 **Morning Program (continued)**

Discussion Subjects

The role and major contributions of private industry in:

1. Supporting legislation and funding
2. Developing training personnel
3. Developing instructional materials
4. Updating training technology
5. Coordinating job requirements with manpower needs.

Panelists:

John A. Beaumont, Director
Services Branch
Division of Vocational and Technical Education
U.S. Office of Education
Washington, D.C.

The role and major contributions of Federal, State and local educational institutions in the five discussion subjects.

Joseph Taylor, Representative
International Brotherhood of Electrical Workers
Washington, D.C.

The role and major contributions of labor in the above five discussion subjects.

Morris A. Horowitz, Chairman
Economics Department
College of Liberal Arts
Northeastern University
Boston, Massachusetts

The role, importance and major contributions of research to manpower training and development in the United States.

10:20 a.m. Intermission

10:40 a.m. Summary by Panel Chairman, Mr. Kunze

CINTERFOR Delegates' questions to panelists

12:30 p.m. Lunch

Tuesday, September 10 Afternoon Program

Visit training programs at NASA

Wednesday, September 11 Morning Program 9:00 a.m. - 12:30 p.m.

Greetings – Mr. David G. Hill, Executive Director of the Mayor's Committee on Community Resources, representing Mr. Carl B. Stokes, Mayor of Cleveland.

Wednesday,
September 11

Morning Program (continued)

Involvement of Government and Non-Government Organizations in the Development of Manpower and Training in the United States

9:00 a.m. Chairman – William Mirengoff
Deputy Associate Manpower Administrator
U.S. Department of Labor
Washington, D.C.

Provides an overview of government and its relation with other organizations in the development of manpower and training.

Panelists:

Martin H. Bowerman, Program Director
American Society for Training and Development
Madison, Wisconsin

Describes ASTD's organizational structure, objectives and contribution to manpower training and development in the United States.

Lowell Burkett, Executive Director
American Vocational Association
Washington, D.C.

Describes the programs of government and non-government organizations involved in training and development in the United States.

Ray Lesniok
Skills Trade Chairman
International Union of Electrical, Radio and Machine Workers #707
Cleveland, Ohio

Describes organizations and operations of joint training advisory committees.

10:15 a.m. Intermission

10:30 a.m. Robert Wilson
Office of Labor Affairs
Agency for International Development
Department of State
Washington, D.C.

Describes recent trends and major contributions to manpower training in the United States.

Summary by Panel Chairman, William Mirengoff

CINTERFOR Delegates' questions to panelists

12:30 p.m. Lunch

Wednesday,
September 11 Afternoon Program

2:00 p.m. Visit to Warner-Swasey Machine Company

Wednesday,
September 11 Evening Program - Dinner

7:30 p.m. Speakers – Darwin M. Bell
Deputy Assistant Secretary
U.S. Department of Labor
Washington, D.C.

Fernando Romero
SENATI
Lima, Peru

A. Clifford Thornton
Vice President
Eaton, Yale and Towne, Inc.
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Annex II

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Chief, Labor Program
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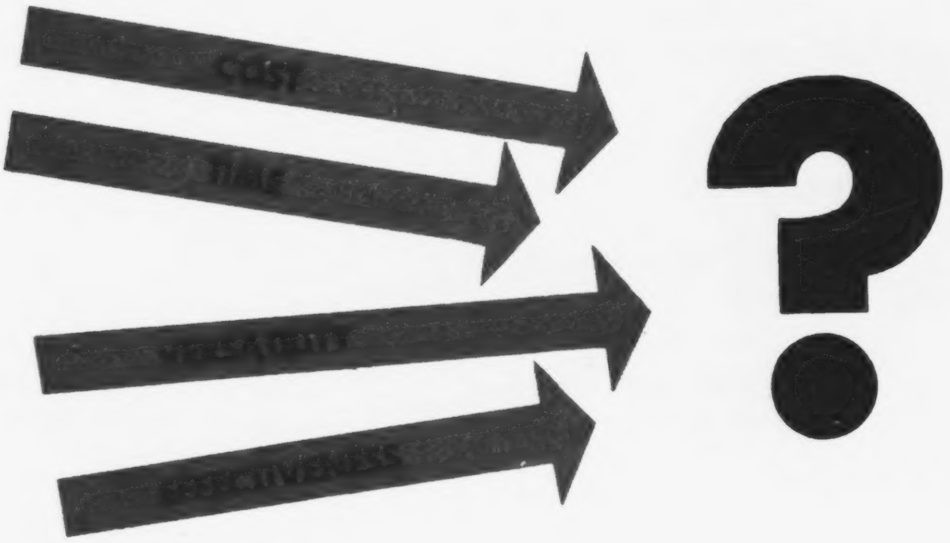
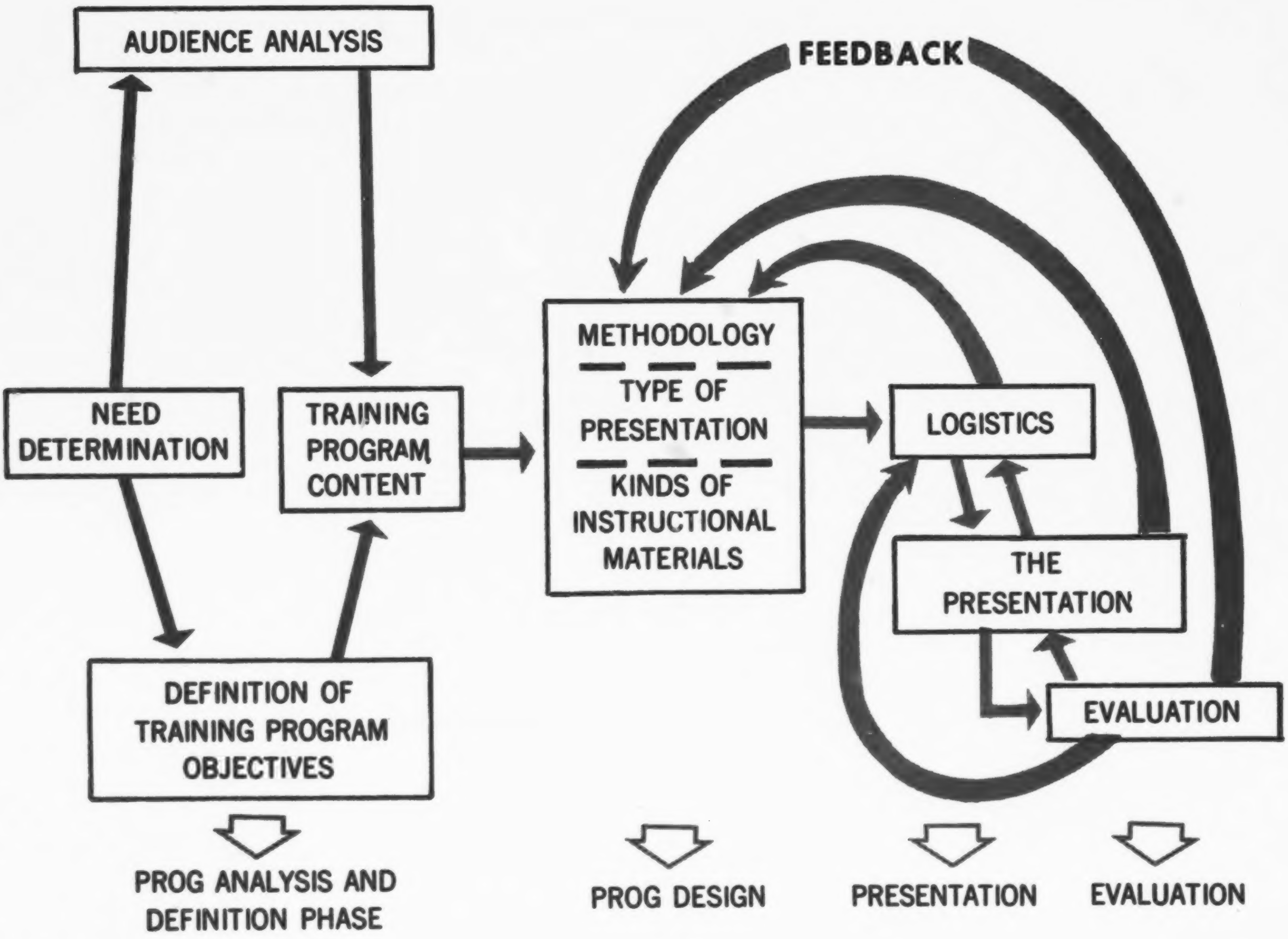
Annex III

THE SYSTEMS APPROACH TO TRAINING

TYPES OF INSTRUCTIONAL MATERIALS

BLACKBOARD
CHARTS
PRINTED MATERIALS
SLIDES
TRANSPARENCIES
TAPE RECORDINGS
MOVIES
VIDEO TAPES
SIMULATORS
PROGRAMMED INSTR


COST
TIME
VERSATILITY
EFFECTIVENESS
?


AUDIENCE ANALYSIS
FEEDBACK
NEED DETERMINATION
TRAINING PROGRAM CONTENT
METHODOLOGY
TYPE OF PRESENTATION
KINDS OF INSTRUCTIONAL MATERIALS
LOGISTICS
THE PRESENTATION
EVALUATION
DEFINITION OF TRAINING PROGRAM OBJECTIVES
PROG ANALYSIS AND DEFINITION PHASE
PROG DESIGN
PRESENTATION
EVALUATION